

AUTHOR INDEX

VOLUME 56

A

Abrams, Melvin S.

See Felt, Earl J., and Abrams, Melvin S.

Adams, C. H., and Supnik, R. H.

An Improved Procedure for Measuring Tensile Modulus and Its Use in Studying the Modulus-Density Relationship for Polyethylene Resin. Published in *ASTM BULLETIN*, No. 217, Oct., 70 (TP204).

Adams, R. C.

Committee D-19: The First Quarter Century—Summary of Proceedings of Pacific Area Meeting, 49.

Aggen, G. N.

Discussion, 684.

Alden, R. C.

ACR Notes—The Newly Discovered Fact. Published in *ASTM BULLETIN* No. 215, July, 43.

Alexander, A. L.

Evaluation of Phosphate Coating over Electrodeposited Zinc—Summary of Proceedings of *STP 197*, 54.

Alexander, E. W.

See Sieffert, L. E., and Alexander, E. W.

Alger, J. V., Roberts, E. C., Lent, R. P., and Anderton, G. W.

All-Glass Multiple-Test Apparatus for Corrosion Testing of Stainless Steels. Published in *ASTM BULLETIN*, No. 214, May, 57 (TP115).

Amy, J. A.

See Bigelow, W. C., Amy, J. A., and Brockway, L. O.

Anderegg, F. O.

Discussion, No. 214, May, 56 (TP114).

Anderson, A., and Bjerrum, L.

Vane Testing in Norway—Summary of Proceedings of *STP 193*, 1397.

Anderson, Richard.

Nondestructive Testing of Bonded Metal Sandwich Materials—Summary of Proceedings of Pacific Area Meeting, 34.

Anderton, G. W.

See Alger, J. V., Roberts, E. C., Lent, R. P., and Anderton, G. W.

Arni, H. T., Foster, B. E., and Clevenger, R. A.

Automatic Equipment and Comparative Test Results for the Four ASTM Freezing-and-Thawing Methods for Concrete, 1229, Disc., 1254.

Arnold, James S.

An ultrasonic Technique for Nondestructive Evaluation of Metal-to-Metal Adhesive Bonds. Summary of Proceedings of Pacific Area Meeting, 43, 51.

Aroni, S.

See Francis, A. J., Brown, W. P., and Aroni, S.

Ashcraft, E. B.

Foreword—Symposium on pH Measurement—Summary of Proceedings of *STP 190*, 1455.

Use of Radioactive Tracers in the Study of Soil Removal and Detergency—Summary of Proceedings of Pacific Area Meeting, 51.

Ashley, R.

Discussion, 1136.

Asseff, P. A., Levin, Harry, and Sprague, H. G., and Cooperators.

Measurement of Extreme-Pressure Properties of Lubricants. Published in *ASTM BULLETIN*, No. 216, Sept., 25.

B

Babbitt, J. D.

The Movement of Moisture through Solids. Published in *ASTM BULLETIN*, No. 212, Feb., 58 (TP46).

Backer, Stanley

Tensile Load-Deformation Testing of Textile Structures—Summary of Proceedings, *STP 194*, 1456.

Badger, W. L.

Discussion, 753.

Baker, Don.

Observation on Brinell Hardness Testing of Titanium Sponge—Summary of Proceedings of Pacific Area Meeting, 41.

Baker, M. D.

Introduction to Symposium on Steam Quality—Summary of Proceedings of *STP 192*, 1457.

Baldwin, W. M., Jr.

See Form, G. W., and Baldwin, W. M., Jr.

- Barath, Alex.**
Ultrasonic Inspections of Aircraft Forgings—Summary of Proceedings of Pacific Area Meeting, 43.
- Barmack, B. J.**
The Misuse of the Preece Test. Published in ASTM BULLETIN, No. 217, Oct., 38.
- Barnes, G. C.**
See Ryder, E. A., and Barnes, G. C.
- Barry, H. A.**
See Schapiro, Leo, and Barry, H. A.
- Bartelmes, R. F.**
Full Scale Testing of Prefabricated Military Buildings—Summary of Proceedings of Pacific Area Meeting, 43.
- Barth, V. C.**
Direct-Reading Spectrographic Evaluation of Used Railroad Oils—Summary of Proceedings of Pacific Area Meeting, 42.
- Bates, R. G.**
Meaning and Standardization of pH Measurements—Summary of Proceedings of STP 190, 1455.
- Battalora, J. R., and Pulsifer, D. E.**
High Temperature Testing of Adhesives for Aircraft Structural Application—Summary of Proceedings of Pacific Area Meeting, 47.
- Beadle, R. H.**
Laboratory Research on Burning No. 6 Residual Fuel in an 8½ x 10 Opposed Piston Diesel Engine—Summary of Proceedings of Pacific Area Meeting, 39.
- Beck, W. N.**
See McGonnagle, W. J., and Beck, W. N.
- Belt, J. R.**
See King, H. F., and Belt, J. R.
- Benjamin, Irwin A.**
Discussion, 1228.
- Bennett, A. Lee.**
Importance of Testing to the Clay Pipe Industry—Summary of Proceedings of Pacific Area Meeting, 45.
- Bennett, J. A.**
Discussion, 1047.
- Benoit, Lester.**
Trade Technical Groups and Government—Industry Standardization. Published in ASTM BULLETIN, No. 211, Jan., 26.
- Bentley, A. L.**
Discussion, 1347.
- Berggren, R. G.**
See Wilson, J. C., and Berggren, R. G.
- Berggren, R., Dismuke, C., Feldman, M. J., and Wilson, J. C.**
The Mechanics of Testing Irradiated Materials—Summary of Proceedings of Pacific Area Meeting, 48.
- Berk, Sigmund, Ebert, Helen, and Keeser, H. M.**
Radioactive Tracers in Nondestructive Inspection of Internal Components. Published in ASTM BULLETIN, No. 217, Oct., 65 (TP199).
- Bernhard, R. K.**
Microseismics—Summary of Proceedings of Pacific Area Meeting, 41.
Soil Density and Soil Moisture Determination by Radiation Methods—Summary of Proceedings of Pacific Area Meeting, 39.
- Bernhard, R. K., Chasek, M., and Griggs, P.**
Further Data on Gamma Ray Transmission Through Soils, 1288. Disc., 1300.
- Bessen, I. I.**
Observations of Bainite Formation with the Thermionic Emission Microscope, 415. Disc., 425.
- Best, C. H.**
See Kelly, J. W., Polivka, M., and Best, C. H.
- Bigelow, W. C., Amy, J. A., and Brockway, L. O.**
Electron Microscopic Identification of the γ' Phase of Nickel-Base Alloys, 945.
- Binder, W. O., Thompson, J., and Bishop, C. R.**
Intergranular Corrosion Resistance of Low-Carbon Austenitic Chromium-Manganese-Nickel Steels, 903. Disc., 920.
- Birks, L. S., and Seal, R. T.**
Comparison of Surface and Volume Transformations in Alloy Steel, 436.
- Bishop, C. R.**
See Binder, W. O., Thompson, J., and Bishop, C. R.
- Bishop, H. F.**
See Johnson, W. H., and Bishop, H. F.
- Bjerrum, L.**
See Anderson, A., and Bjerrum, L.
- Blake, Carl, and Eck, Lawrence T.**
Titanium Sponge Quality Evaluation at Titanium Metals Corporation of America—Summary of Proceedings of Pacific Area Meeting, 41.
- Blatherwick, A. A., and Lazan, B. J.**
The Effect of Changing Cyclic Modulus on Bending Fatigue Strength, 1012. Disc., 1034.

- Blum, William.**
History of ASTM Committee B-8—Summary of Proceedings of *STP 197*, 54.
- Bly, J. H.**
Introduction to Symposium on Nondestructive Testing—Committee E-7 Operation—Summary of Proceedings of Pacific Area Meeting, 38.
- Boegehold, A. L.**
Materials in the Automobile of the Future. Published in ASTM, *BULLETIN*, No. 218, Dec., 18. Published in *Metals Progress*, Am. Soc. Metals, Sept., 1956, 103.
- Bolin, Harry W.**
Trends in School Building Design—Summary of Proceedings of Pacific Area Meeting, 44.
- Boltax, A.**
Effects of Radiation Damage on Precipitation Hardening Alloys with Special Reference to Copper-Iron Alloys, 50.
- Bopp, C. D.**
See Sisman, O., and Bopp, C. D.
- Bornemann, A.**
"Tin Disease" in Solder Type Alloys—Summary of Proceedings of *STP 189*, 1138.
- Boswell, F. W.**
Electropolishing of Ferrous Metal Specimens for Electron Metallography, 426.
- Bowen, Dwain.**
Survey of Radiation Effects on Fuel Materials—Summary on Proceedings of Pacific Area Meeting, 48.
- Bowman, G. B.**
Evaluation of Methods Available for Measurement of Surface Luster of Electroplated Coatings—Summary of Proceedings of *STP 197*, 54.
- Boynton, R. S.**
Discussion, 1316.
- Brandes, O. L.**
Determination of "Active" Sulfur Content of Sulfur-Bearing Cutting Fluids. Published in ASTM *BULLETIN*, No. 214, May, 28.
- Brennan, E. W., and Moyer, R. G.**
Water Leaching of Additives—Summary of Proceedings of Pacific Area Meeting, 36.
- Briggs, C. W.**
See Evans, E. B., Ebert, L. J., and Briggs, C. W.
- Brink, R. H., and Halstead, W. J.**
Studies Relating to the Testing of Fly Ash for Use in Concrete (*R*), 1161. Disc., 1207.
- Brockway, L. O.**
See Bigelow, W. C., Amy, J. A., and Brockway, L. O.
- Broughten, J. L., and Moore, C. C.**
Locomotive Lubricating Oil Requirements as Related to Fuels—Summary of Proceedings of Pacific Area Meeting, 39.
- Brown, C. B.**
See Stephens, D. W., and Brown, C. B.
- Brown, Phillip B.**
See Palmer, L. A., Brown, Philip B., and Yeomans, C. M.
- Brown, W. F., Jr.**
See Jones, M. H., and Brown, W. F., Jr.
See Sessler, J. G., and Brown, W. F., Jr.
Discussion, 614.
- Brown, W. P.**
See Francis, A. J., Brown, W. P., and Aroni, S.
- Bryan, Ford, R.**
Section J Committee Report of Spectrographic Analysis of Lubricating Oils—Summary of Proceedings of Pacific Area Meeting, 42.
- Burmister, Donald M.**
Application of Environmental Testing of Soils, 1351.
Judgment and Environment Factors in Soil Investigations. Published in ASTM *BULLETIN*, No. 217, Oct., 55 (TP189) (*R*).
- Burrill, E. A.**
Recommended Practices for Radiographic Inspection—Summary of Proceedings of Pacific Area Meeting, 38.
- Butler, J. P.**
Rehabilitation of Fatigue-Wear Structures—Summary of Proceedings of Pacific Area Meeting, 53.
- C**
- Cabal, A. V., and Capowski, J.**
Effect of Fuel Composition upon Intake Valve Deposit Forming Characteristics—Summary of Proceedings of Pacific Area Meeting, 46.
- Cadling, L., and Lindskog, G.**
Some Notes on Five Years Experience From Field Vane Tests in Sweden—Summary of Proceedings of *STP 193*, 1397.
- Cahn, H. L.**
Silicones in the Protective Coatings Industry—Summary of Proceedings of Pacific Area Meeting, 51.
- Calkins, G. D.**
See Whitney, J. E., Chandler, E. M., Gates, J. E., and Calkins, G. D.
- Calkins, V. P.**
Problems of Radiation Dosimetry—Summary of Proceedings of Pacific Area Meeting, 52.
- Campbell, T. M., Jr.**
See Coulter, E. E., and Campbell, T. M., Jr.

- Capowski, J.**
See Cabal, A. V., and Capowski, J.
- Carew, W. F.**
See Crossley, F. A., Carew, W. F., and Kessler, H. D.
- Carlson, R. L.**
See MacDonald, R. J., Carlson, R. L., and Lankford, W. T.
- Carman, C. M.**
Discussion, 565.
- Carney, D. J.**
See Whittenberger, E. J., Rosenow, E. R., and Carney, D. J.
- Carpenter, C. A.**
The Role of Specific Gravity in the Design and Control of Bituminous Paving Mixtures—Summary of Proceedings of *STP 191* 1398.
- Carter, R. L.**
Radiation Effects on Graphite—Summary of Proceedings of Pacific Area Meeting, 48.
- Carr, F. L.**
Discussion, 587.
- Casey, Joan.**
See Vind, Harold, Maraoka, J., Casey, Joan, and Hochman, H.
- Castleman, L.**
Survey of the Effects of Neutron Bombardment on Structural Materials—Summary of Proceedings of Pacific Area Meeting, 50.
- Chandler, E. M.**
See Whitney, J. E., Chandler, E. M., Gates, J. E., and Calkins, G. D.
- Chang, T. S., and Kesler, C. E.**
Correlation of Sonic Properties of Concrete with Creep and Relaxation, 1257.
- Chasek, M.**
See Bernhard, R. K., Chasek, M., and Griggs, P.
- Chatten, C. K., Scoville, W. E., Jr., and Conant, F. S.**
A Study of Rheological Testing of Elastomers at Low Temperatures. Published in *ASTM BULLETIN*, No. 217, Oct., 47 (TP181).
- Cheorvas, W., and Plumtree, W. C.**
Effect of Dimensional Factors and Temperature on the Shear Strength of Aluminum Honeycomb—Summary of Proceedings of Pacific Area Meeting, 47.
- Chiswik, H. H.**
See Kittel, J. H., Paine, S. H., and Chiswik, H. H.
- Chittick, M. B.**
Solvents and Thinners—Summary of Proceedings of Pacific Area Meeting, 50.
- Chu, T. Y.**
See Laguros, J. G., Davidson, D. T., Handy, R. L., and Chu, T. Y.
- Clapp, William F.**
See Richards, A. P., and Clapp, William F.
- Clapper, R. B.**
See Fenn, R. W., Jr., and Clapper, R. B.
- Clapper, R. B., and Watz, J. A.**
Determination of Fatigue Crack Initiation and Propagation in a Magnesium Alloy—Summary of Proceedings of Pacific Area Meeting, 52.
- Clark, W. R., and Perley, G. A.**
Modern Developments in pH Instrumentation—Summary of Proceedings of *STP 190*, 1455.
- Clevenger, R. A.**
Arni, H. T., Foster, B. E., and Clevenger, R. A.
- Coffman, B. S.**
Controlling Accuracy With a More Rapid Sand Cone Density Test. Published in *ASTM BULLETIN*, No. 218, Dec., 57 (TP235).
- Cohen, P.**
See Waldman, L. A., and Cohen, P.
- Collins, S. C., Ezekiel, F. D., Sepp, O. W., and Rizika, J. W.**
The Strength of Certain Stainless and Carbon Steels at Low Temperatures, 687. Disc. 699.
- Conant, F. S.**
See Chatten, C. K., Scoville, W. E., Jr., and Conant, F. S.
- Converse, F. J.**
Vibratory Compaction of Cohesive Soil by Low Frequency Vibration—Summary of Proceedings of Pacific Area Meeting, 41.
- Cook, H. D.**
See Ries, H. E., Cook, H. D., and Loane, C. M.
- Cook, R. L.**
See Walsh, R. A., Cook, R. L., and Lula, R. A.
- Cooper, R. S.**
See Vallerga, B. A., Seed, H. B., Monismith, C. L., and Cooper, R. S.
- Corten, H. T., and Sinclair, G. M.**
A Wire Fatigue Machine for Investigation of the Influence of Complex Stress Histories, 1124. Disc., 1136.
- Coulter, E. E., and Campbell, T. M., Jr.**
Steam Purity Determination by Tracer Techniques—Summary of Proceedings of *STP 192*, 1457.

Countryman, David.

Developments in Softwood Plywood Design and Construction—Summary of Proceedings of Pacific Area Meeting, 46.

Craig, C. L.

Low-Temperature Resistance Test Methods for Non-Rigid Insulation—Summary of Proceedings *STP 188*, 1459.

Significance of Minimum Property Value of Electrical Insulating Materials—Summary of Proceedings of *STP 188*, 1459.

Crampton, D. K.

Condensed Version of the 1956 Gillett Lecture on Structural Chemistry and Metallurgy of Copper—Summary of Proceedings of Pacific Area Meeting, 48.

Structural Chemistry and Metallurgy of Copper—Gillett Memorial Lecture, see Summary of Proceedings, 12 (Issued as separate pamphlet).

Criscuolo, E. L.

See O'Connor, D. T., and Criscuolo, E. L.

Cropper, W. V.,

See Mallatt, R. C., Demkovich, P. A., and Cropper, W. V.

Crossley, F. A., Carew, W. F., and Kessler, H. D.

Development of Titanium-Base Alloys for Elevated Temperature Application—Summary of Proceedings of Pacific Area Meeting, 41.

Cummings, H. N.

Discussion, 1119.

Curdts, E. B.

Introduction to Symposium on Corona—Summary of Proceedings of *STP 198*, 1458.

D**Daniels, N. H. G., and Dorn, J. E.**

The Effect of Temperature and Frequency on the Fatigue of High Purity Aluminum—Summary of Proceedings of Pacific Area Meeting, 53.

Davis, E. N.

The Application of X-Ray Spectrography to Refinery Control of Additive Metals in Lubricating Oils—Summary of Proceedings of Pacific Area Meeting, 42.

Davis, M. V.

A Method for Testing and Evaluating the Joint Properties of a Copper Liner Soldered in an Aluminum Casting—Summary of Proceedings of *STP 189*, 1138.

Davis, R. E., Troxell, G. E., McCall, D., and McCann, R. A.

Test of Prestressed Expanded Shale Concrete Beams Subject to Short-Time and Sustained Loads—Summary of Proceedings of Pacific Area Meeting, 49.

Davidson, D. T.

See Laguros, J. G., Davidson, D. T., Handy, R. L., and Chu, T. Y.

De Agazio, A. W.

Westinghouse Testing Reactor—Summary of Proceedings of Pacific Area Meeting, 48.

Degenkolb, H. J.

Building Design for Lateral Forces—Summary of Proceedings of Pacific Area Meeting, 44.

DeHaan, A.

Activation Analysis for Industry—Summary of Proceedings of Pacific Area Meeting, 51.

Deily, G. J.

See Leeser, D. O., and Deily, G. J.

Delmonte, John.

Correlations Between Electrical Measurements and Mechanical Measurements on Epoxy Plastics Materials—Summary of Proceedings of Pacific Area Meeting, 34.

Demkovich, P. A.

See Mallatt, R. C., Demkovich, P. A., and Cropper, W. V.,

Demmler, A. W., Sinnott, M. J., and Thomassen, L.

The Notched Fatigue Properties of Some Titanium Alloys, 1051. Disc., 1061.

Dervishyan, Aram.

The Stress-Hardness Relation. Published in *ASTM BULLETIN*, No. 215, July, 71 (TP127).

Dienes, G. J.

Displaced Atoms in Solids—Comparison Between Theory and Experiment—Summary of Proceedings of Pacific Area Meeting, 48.

Dietz, Albert G. H.

See Dorsey, James, McGarry, Frederick J., and Dietz, Albert G. H.

Tension Testing of Adhesives—Summary of Proceedings of *STP 194*, 1456.

Dismuke, C.

See Berggren, R., Dismuke, C., Feldman, M. J., and Wilson, J. C.

Disque, F. C., Jr.

The Use of Rosin and Activated Rosin Fluxes—Summary of Proceedings of *STP 189*, 1138.

Dorey, D. B., and Schriever, W. R.

A Philosophy on Loading Tests. Published in *ASTM BULLETIN*, No. 214, May (R), 37 (TP95).

Structural Test of a House Under Simulated Wind and Snow Loads—Summary of Proceedings of Pacific Area Meeting, 43.

Dorn, J. E.

- See Daniels, N. H. G., and Dorn, J. E.
See Sherby, O. D., Trozera, T. A., and Dorn, J. E.

Dorsey, James, McGarry, Frederick J., and Dietz, Albert G. H.

- High Speed Tension Testing Machine for Plastics. Published in *ASTM BULLETIN*, No. 211, Jan., 34 (TP6).

Dowd, J. D.

- Solder, Fluxes, and Techniques for Soldering Aluminum—Summary of Proceedings of *STP 189*, 1138.

Driscoll, David E.

- Discussion, 519.

Drow, John T.

- See Norris, Charles B., James, William L., and Drow, John T.

Dubuc, Julien, Welter, Georges, and Krivobok, V. N.

- Studies of Stainless Steel Columns Subject to Compression Loads—Summary of Proceedings of Pacific Area Meeting, 37.

DuRose, A. H.

- Atmospheric Exposure of Electroplated Lead Coatings on Steel—Summary of Proceedings of *STP 197*, 54.

Dykins, J. E.

- NAVCERELAB Facilities for Evaluating Prefabricated Buildings—Summary of Proceedings of Pacific Area Meeting, 43.

E**Earle, S. L.**

- Filtering Diesel Engine Lubricating Oils—Summary of Proceedings of Pacific Area Meeting, 42.

Ebert, Helen.

- See Berk, Sigmund, Ebert, Helen, and Keeser, H. M.

Ebert, L. J.

- See Evans, E. B., Ebert, L. J., and Briggs, C. W.

Eby, Robert E.

- Developments in Glued-Laminated Construction—Summary of Proceedings of Pacific Area Meeting, 46.

Eck, Lawrence T.

- See Blake, Carl, and Eck, Lawrence T.

Edmondson, C. H.

- The Migration of Marine Borers—Summary of Proceedings of Pacific Area Meeting, 36.

Eisler, S. L.

- Electroplating and Metal Preservation Studies Utilizing Radioisotopes—Summary of Proceedings of Pacific Area Meeting, 51.

Ellingson, O. A., Gillam, J. L., and Koparda, J. E.

- Determination of "Water-Soluble Alkali" in Cements. Published in *ASTM BULLETIN*, No. 212, Feb., 63 (TP51).

Elliott, O. M.

- Sea Water Purification—Summary of Proceedings of Pacific Area Meeting, 49.

Emme, Frank E.

- See Kelch, Norman W., and Emme, Frank E.

Endicott, H. S., and Weber, K. H.

- Extremal Nature of Dielectric Breakdown—Effect of Sample Size—Summary of Proceedings *STP 188*, 1459.

English, J. M., and Schneider, R. R.

- Research Testing Methods for Plain, Grouted, and Reinforced Grouted Brick Masonry—Summary of Proceedings of Pacific Area Meeting, 45.

Erdman, Donald.

- Advanced Ultrasonic Testing in Europe and America—Summary of Proceedings of Pacific Area Meeting, 40.

Erickson, E. C. O.

- See Luxford, R. F., and Erickson, E. C. O.

Eun, Lee U.

- See Flanigan, Alan E., and Eun, Lee U.

Evans, E. B., Ebert, L. J., and Briggs, C. W.

- Fatigue Properties of Comparable Cast and Wrought Steels (*R*), 979.
Disc., 1011.

Evans, R. M.

- See Pattee, H. E., and Evans, R. M.

Ewing, J. F. and Freeman, J. W.

- Influence of Hot-Working Conditions on the High Temperature Properties of Heat-Resistant Alloys, 756.

Ezekiel, F. D.

- See Collins, S. C., Ezekiel, F. D., Sepp, O. W., and Rizika, J. W.

F**Fachet, J., and Plimpton, F. T. P., Jr.**

- Present Practices in Tensile Strength Testing of Paper in Industry—Summary of Proceedings of *STP 194*, 1456.

Fantini, Ralph.

- See Snyder, Edward B., and Fantini, Ralph.

Feldman, M. J.

- See Berggren, R., Dismuke, C., Feldman, M. J., and Wilson, J. C.

Fellows, Claire H.

- The Challenge of Nuclear Energy Accepted by the Electric Power Industry and ASTM, 55.
Published in *ASTM BULLETIN*, No. 215, July, 69 (TP125).

- Research in the Electric Power Field. Published in ASTM BULLETIN, No. 216, Sept., 39 (TP151).
- Felt, Earl J., and Abrams, Melvin S.**
Strength and Elastic Properties of Soil-Cement Mixtures—Summary of Proceedings of Pacific Area Meeting, 44.
- Fenn, R. W., Jr.**
Determination of Young's Modulus Under Conditions of Relaxation—Summary of Proceedings of Pacific Area Meeting, 49.
- Fenn, R. W., Jr., and Clapper, R. B.**
Evaluation of Test Variables in the Determination of Shear Strength, 842. Disc., 858.
- Fenske, C. W.**
Deep Vane Tests in Gulf of Mexico—Summary of Proceedings of STP 193, 1397.
- Fenske, M. R.**
See Klaus, E. E., and Fenske, M. R.
- Fitzgerald, J. Vincent, and Kastenbein, E. L.**
Testing Ceramic Tile—Summary of Proceedings of Pacific Area Meeting, 45.
- Flanigan, Alan E., and Eun, Lee U.**
The Isothermal Evolution of Hydrogen from Arc Welds in Mild Steel—Summary of Proceedings of Pacific Area Meeting, 37.
- Folkman, R. L., and Schussler, M.**
Development of Standardized Sample, Preparation and Testing Techniques for Unalloyed Titanium Sheet—Summary of Proceedings of Pacific Area Meeting, 41.
- Form, G. W., and Baldwin, W. M., Jr.**
The Effect of Brittle Skins on the Ductility of Metals (R), 645. Disc., 659.
- Forrest, D. L.**
See Newacheck, R. L., Kohl, J., and Forrest, D. L.
- Foster, B. E.**
See Arni, H. T., Foster, B. E., and Clevenger, R. A.
- Fowler, R. M.**
Oxygen Analysis—Summary of Proceedings of Pacific Area Meeting, 41.
- Francis, A. J., Brown, W. P., and Aroni, S.**
Full-Scale Tests of Pre-Cast Multi-Story Flat Constructions—Summary of Proceedings of Pacific Area Meeting, 43.
- Frankel, H. E.**
Discussion, 1117.
- Freas, Alan B.**
Factors Affecting Strength and Design Principles of Glued-Laminated Construction—Summary of Proceedings of Pacific Area Meeting, 46.
- Freeman, J. W.**
See Ewing, J. F., and Freeman, J. W.
- Fricke, W. G., Jr.**
See Hunter, M. S., and Fricke, W. G., Jr.
- Freiser, H.**
Quantitative Applications of pH Measurements in Analytical Chemistry—Summary of Proceedings of STP 190, 1455.
- Fuchs, Henry O.**
Shotpeening Effects and Specifications—Summary of Proceedings of Pacific Area Meeting, 37.
- Furby, N. W., Hanly, F. J., and Vincent, J. A.**
Rusting in Turbine Oil-Systems—Summary of Proceedings of Pacific Area Meeting, 36.
- G**
- Gallagher, E. C.**
The D-1 Program on Drying Oils—Summary of Proceeding of Pacific Area Meeting, 50.
- Gambrill, C. M.**
Part I: Spectrographic Analysis of Lubricating Oils. Introduction—Summary of Proceedings of Pacific Area Meeting, 42.
- Garin, P. V.**
Operation of Railroad Diesel Locomotives with Dual Fuel Systems—Summary of Proceedings of Pacific Area Meeting, 39.
- Garofalo, F.**
See Roeloffs, R., and Garofalo, F.
Discussion, 612.
- Gates, J. E.**
See Whitney, J. E., Chandler, E. M., Gates J. E., and Calkins, G. D.
- Geniesse, J. C.**
A Comparison of Viscosity-Index Proposals. Published in ASTM BULLETIN, No. 215, July, 81 (TP137).
- Gibbs, H. J.**
An Apparatus and Method of Vane Shear Testing of Soils—Summary of Proceedings of STP 193, 1397.
- Gilbo, C. F.**
Conductimeters, Their Construction and Use. Published in ASTM BULLETIN, No. 212, Feb., 68 (TP56).
- Gillam, J. L.**
See Ellingson, O. A., Gillam, J. L., and Kopanda, J. E.
- Gohn, G. R.**
See Torrey, M. N. and Gohn, G. R.
Discussion, 1034, 1136.
- Gomberg, H.**
The Potential of Autoradiography as a Testing Technique—Summary of Proceedings of Pacific Area Meeting, 51.

Gonser, Bruce W.

ACR Notes—A Limitless Market. Published in ASTM BULLETIN, No. 216, Sept., 21.

Introduction to Symposium on Solder—Summary of Proceedings of STP 189, 1138

Goodrich, J. E.

See Jones, D. R., Kipp, K. L., and Goodrich, J. E.

Graft, W. H., and Rostoker, W.

The Measurement of Elastic Modulus of Titanium Alloys—Summary of Proceedings of Pacific Area Meeting, 38.

Grant, N. J.

See Monkman, F. C., and Grant, N. J.

Graves, H. K.

Variability of Dielectric Breakdown in Sheet Insulation—Summary of Proceedings STP 188, 1459.

Greenfeld, S. H.

See Kleinschmidt, L. R., and Greenfeld, S. H.

Greenwood, J. Neill.

Creep-Rupture Tests in Shear of Cast Antimony-Lead Alloys, 859.

Grieb, W. E.

See Timms, A. G., and Grieb, W. E.

Grieve, G. J.

Protective Coatings for the Railroad Industry—Summary of Proceedings of Pacific Area Meeting, 52.

Griffin, Donald F.

The Relationship Between Water Content and the Accuracy with Which In-Place Densities of Sands may be Measured. Published in ASTM BULLETIN, No. 212, Feb., 51 (TP39).

Griffin, R. L., Miles, T. K., Penther, C. J., and Simpson, W. C.

Sliding Plate Microviscometer for Rapid Measurement of Asphalt Viscosity in Absolute Units—Summary of Proceedings of Pacific Area Meeting, 37.

Griggs, P.

See Bernhard, R. K., Chasek, M., and Griggs, P.

Grimmer, L. E.

See Williams, F. M., Grimmer, L. E., McAdams, M. M., and Yanoshek, S.

Gross, D.

See Robertson, A. F., Gross, D., and Loftus, J.

Guard, R. W.

Discussion, 805.

Guettel, Charles L.

A New Thermocouple for Service in Reducing Atmosphere. Published in ASTM BULLETIN, No. 216, Sept. 64 (TP176).

Guinn, V. P., Lukens, H. R., Jr., and Wagner, D. C.

Refinery Scale Applications of Radioactive Tracers—Summary of Proceedings of Pacific Area Meeting, 51.

Gurney, W. B.

Measurement and Purification of Steam to 0.01 ppm Total Dissolved Solids—Summary of Proceedings of STP 192, 1457.

Gusak, J. A.

See Moore, A. A., and Gusack, J. A.

H**Hague, J. L.**

Ion-Exchange in the Analysis of Metals—Summary of Proceedings of STP 195, 1454.

Halstead, W. J.

See Brink, R. H., and Halstead, W. J.

Hammond, H. K.

Gloss Measurement—Past, Present and Future—Summary of Proceedings of Pacific Area Meeting, 50.

Handy, R. L.

See Laguros, J. G., Davidson, D. T., Handy R. L., and Chu, T. Y.

Hanly, F. J.

See Furby, N. W., Hanly, F. J., and Vincent, J. A.

Hansen, W. C.

The Properties of Gypsum and the Role of Calcium Sulfate in Portland Cement. Published in ASTM BULLETIN, No. 212, Feb., 66 (TP54).

Harnden, G. H.

Solder Symposium Summation—Summary of Proceedings of STP 189, 1138.

Harr, R. E.

Evaluation of Testing Methods for Supplementary Coatings—Summary of Proceedings of STP 197, 54.

Harrington, Robert W.

Testing Brick, Mortar, and Grout—Color Film with Narration—Summary of Proceedings of Pacific Area Meeting, 45.

Harris, J. C., Kramer, M. G., and Trexler, M. V.

Detergent Corrosion Test for Vitreous Enamel Surfaces. Published in ASTM BULLETIN, No. 216, Sept., 61 (TP173).

Hartbower, Carl E.

Crack Initiation and Propagation in the V-Notch Charpy Impact Specimen, 521.

Hastings, C. H.

Radiographic Procedures—Summary of Proceedings of Pacific Area Meeting, 38.

- Heger, J. J.**
Discussion, 921.
- Helms, S. B.**
See McCoy, W. J., and Helms, S. B.
- Hendrickson, N. E.**
Special Techniques for Increasing Strength and Fatigue Life of Steel Stressed in Torsion—Summary of Proceedings of Pacific Area Meeting, 37.
- Hester, J. A., and Smith, O. F.**
Alkali Aggregate Phase of Chemical Reactivity in Concrete, Part II—Summary of Proceedings of Pacific Area Meeting, 47.
- Heyer, R. H.**
Discussion, 721.
- Hill, W. A.**
Vane In-Place Soil Shear Measuring Device Developed and Applied by Oregon State Highway Department—Summary of Proceedings of STP 193, 1397.
- Hills, Donald C.**
A New Coal Plastometer. Published in ASTM BULLETIN, No. 218, Dec., 34 (TP212).
- Hinkle, G. W.**
Production and Fabrication of New AISI Types 201 and 202. Published in ASTM BULLETIN, No. 220, Feb., 1957, 47 (TP35).
- Hitchcock, R. D., and Starr, W. L.**
A New Optical Parameter for Glare-Reducing Window Coatings—Summary of Proceedings of Pacific Area Meeting, 53.
- Hochman, H.**
See Roe, T., Hochman, H., and Holden, E. R.
See Vind, Harold, Maraoka, J., Casey, Joan, and Hochman, H.
- Hoffman, C. A.**
Strengths and Failure Characteristics of AMS 5765A (S-816) Alloy in Direct Tensile Fatigue at Elevated Temperatures, 1063.
- Hogan, R. J.**
See Summerson, T. J., Pryor, M. R., Keir, D. S., and Hogan, R. J.
- Holden, E. R.**
See Roe, T., Hochman, H., and Holden, E. R.
- Holden, F. C., Ogden, H. R., and Jaffee, R. I.**
A Micro Notched-Bar Impact Test for Titanium Alloys—Summary of Proceedings of Pacific Area Meeting, 38.
The Effect of Temperature on the Uniform Elongation of Titanium Alloys—Summary of Proceedings of Pacific Area Meeting, 35.
- Holste, Richard F., Jacobs, J. E., and Pace A.**
Electronic X-ray Image Systems—Summary of Proceedings of Pacific Area Meeting, 40.
- Holtz, W. G.**
Experiences with Consolidation of Pipe Bedding by Vibration on the San Diego Aqueduct—Summary of Proceedings of Pacific Area Meeting, 41.
- Horonjeff, R.**
Discussion, 1300.
- Housel, W. S.**
A Generalized Theory of Soil Resistance—Summary of Proceedings of Pacific Area Meeting, 39.
Field and Laboratory Correlation of the Bearing Capacity of Hardpan for Design of Deep Foundations (R), 1320. Disc., 1347.
- Howald, T. S.**
Discussion, 659.
- Howell, F. M.**
Discussion, 1136.
- Hsiao, C. C.**
Inelastic Deformation of Nylon Under Compression (R), 1425.
- Hudgens, J. E.**
The Use of Ion-Exchange Technique in Analytical Chemistry and Radiochemistry—Summary of Proceedings of STP 195, 1454.
- Hunter, M. S., and Fricke, W. G., Jr.**
Fatigue Crack Propagation in Aluminum Alloys, 1038. Disc., 1047.
- Hveem, F. N.**
Discussion, 1317.
- I
- Ingle, G. W.**
Progress in Measuring Color Difference—Summary of Proceedings of Pacific Area Meeting, 50.
- Irvine, C. S.**
Super Materials for Super Performance. Published in ASTM BULLETIN, No. 218, Dec., 11.
- Irvine, Ralstone R.**
The Legal Implications of Standardization. Published in ASTM BULLETIN, No. 212, Feb., 28.
- J
- Jacobs, J. E.**
See Holste, Richard F., Jacobs, J. E., and Pace, A.
- Jaffee, R. I.**
See Holden, F. C., Ogden, H. R., and Jaffee, R. I.
See Schwartzberg, F. R., Williams, N. D., and Jaffee, R. I.
- James, Glenn D.**
Efficient Sampling Techniques in the Ceramic Industry—Summary of Proceedings of Pacific Area Meeting, 45.

- James, William L.**
See Norris, Charles B., James, William L., and Drow, John T.
- James, W. S.**
Part II: General Papers—Spectrographic Analysis of Lubricating Oils—Introduction—Summary of Proceedings of Pacific Area Meeting, 42.
- Johns, A. A., Jr.**
See Miller, E. S., and Johns, A. A., Jr.
- Johns, A. A., Jr., and Miller, E. S.**
Dip-Solder Printed Circuit Joint Characteristics—Summary of Proceedings of *STP* 189, 1138.
- Johnson, Paul V.**
A Test Method for Producing Blast Loading on Clay Masonry Walls—Summary of Proceedings of Pacific Area Meeting, 45.
- Johnson, R. P. A.**
Report on U. S. Forest Products Laboratory Tests of Full-Size Structural Wood Diaphragms Made in Cooperation with State of California and U. S. Army Engineers—Summary of Proceedings of Pacific Area Meeting, 44.
- Johnson, W. H., and Bishop, H. F.**
Effect of Geometry on the Properties of C4A-T6 and SG70A-T6 Aluminum-Alloy Castings, 724. Disc., 737.
- Johnson, W. R.**
Discussion. Published in *ASTM BULLETIN*, No. 214, May, 65 (TP123).
- Johnston, C. B.**
Water Pollution Control in the Los Angeles Area—Summary of Proceedings of Pacific Area Meeting, 49.
- Jones, D. R., Kipp, K. L., and Goodrich, J. E.**
Performance of Residual Fuels in High Speed Diesel Engines—Summary of Proceedings of Pacific Area Meeting, 39.
- Jones, J. B., and Thomas, J. G.**
Ultrasonic Soldering of Aluminum—Summary of Proceedings of *STP* 189, 1138.
- Jones, M. H., and Brown, W. F., Jr.**
An Axial Loading Creep Machine. Published in *ASTM BULLETIN*, No. 211, Jan., 53 (TP25). Disc., 60 (TP32).
- Jursch, C. F.**
Standardization of Railroad Cleaning Materials and Methods—Summary of Proceedings of Pacific Area Meeting, 45.
- K**
- Kahn, N. A.**
Reference Radiographs for Inspection Purposes—Summary of Proceedings of Pacific Area Meeting, 38.
- Kallstenius, T.**
Swedish Vane Borer Design—Summary of Proceedings of *STP* 193, 1397.
- Kastenbein, E. L.**
See Fitzgerald, J. Vincent, and Kastenbein, E. L.
- Kaufman, J. G.**
Discussion, 606.
- Keeser, H. M.**
See Berk, Sigmund, Ebert, Helen, and Keeser, H. M.
- Keir, M. R.**
See Summerson, T. J., Pryor, M. R., Keir, D. S., and Hogan, R. J.
- Kelch, Norman W., and Emme, Frank E.**
Effects of Type, Thickness and Age of Capping Compounds on the Apparent Compressive Strength of Brick—Summary of Proceedings of Pacific Area Meeting, 45.
- Keller, J. L., and Liggett, F. S.**
Induction System Gum—Engine *versus* Bench Test—Summary of Proceedings of Pacific Area Meeting, 46.
- Kelly, J. W., Polivka, M., and Best, C. H.**
A Physical Method for Determining the Composition of Hardened Concrete—Summary of Proceedings of Pacific Area Meeting, 49.
- Kelly, W. S.**
See Kemper, R. S., Jr., and Kelly, W. S.
- Kemper, R. S., Jr., and Kelly, W. S.**
Effect of Irradiation on the Mechanical Properties of Zirconium, 823.
- Kesler, C. E.**
See Chang, T. S., and Kesler, C. E.
- Kessler, H. D.**
See Crossley, F. A., Carew, W. F., and Kessler, H. D.
See Sherman, R. G., Parris, W. M., and Kessler, H. D.
- Ketchum, Verne.**
Developments in Engineered Wood Design and Construction (Other Than Glued-Laminated)—Summary of Proceedings of Pacific Area Meeting, 46.
- Kihlgren, T. E.**
Discussion, 753.
- Kilpatrick, M.**
Theoretical and Practical Problems in the Measurement of Acidity in Nonaqueous Media—Summary of Proceedings of *STP* 190, 1455.
- King, H. F., and Belt, J. R.**
Antiwear Requirements for Navy Turbine Oils—Summary of Proceedings of Pacific Area Meeting, 34.
- Kipp, K. L.**
See Jones, D. R., Kipp, K. L., and Goodrich, J. E.

Kircher, C. E.

Solvent Degreasing—What Every User Should Know—Summary of Proceedings of Pacific Area Meeting, 35.

Kittel, J. H., Paine, S. H., and Chiswik, H. H.

Influence of Heat Treatment on Irradiation-Induced Dimensional Changes in Some Uranium-Zirconium Alloys—Summary of Proceedings of Pacific Area Meeting, 48.

Klaus, E. E., and Fenske, M. R.

The Use of ASTM Slope for Predicting Viscosities. Published in ASTM BULLETIN, No. 215, July, 87 (TP143) (R).

Kleinschmidt, L. R., and Greenfeld, S. H.

Influence of Exposure Conditions on the Accelerated Durability Testing of Asphalt. Published in ASTM BULLETIN, No. 213, April, 69 (TP79).

Klier, E. P.

See Sachs, G., Weiss, V., and Klier, E. P.
See Sachs, G., Muvdi, B. B., and Klier, E. P.

Kohl, J.

See Newacheck, R. L., Kohl, J., and Forrest, D. L.

Kopanda, J. E.

See Ellingson, O. A., Gillam, J. L., and Kopanda, J. E.

Kottcamp, C. F.

Organizational and Functional Aspects of Technical Committee C.—Section I—Summary of Proceedings of Pacific Area Meeting, 34.

Kramer, M. G.

See Harris, J. C., Kramer, M. G., and Trexler, M. V.

Kraus, K.

Anion-Exchange in Metal Separations—Summary of Proceedings of STP 195, 1454.

Krivobok, V. N.

See Dubuc, Julien, Welter, Georges, and Krivobok, V. N.

Kuenzi, E. W.

Methods of Testing Sandwich at Elevated Temperatures—Summary of Proceedings of Pacific Area Meeting, 51.

Kunin R.

The Use of Ion-Exchange Resins in Analytical Chemistry—Summary of Proceedings of STP 195, 1454.

L**Laguros, J. G., Davidson, D. T., Handy, R. L., and Chu, T. Y.**

Evaluation of Lime for Stabilization of Loess (R), 1301. Disc., 1316.

Lane, R. W.

See Sisson, A. B., Straub, F. G., and Lane R. W.

Lang, David L.

A Quick Thermal Conductivity Test on Insulating Materials. Published in ASTM BULLETIN, No. 216, Sept., 58 (TP170). Disc., 60 (TP172).

Lankford, W. T.

See MacDonald, R. J., Carlson, R. L., and Lankford, W. T.

LaQue, F. L.

Discussion, 703.

Lasky, W. E.

Unsolved Problems in Analysis of Diesel Lubricating Oils—Summary of Proceedings of Pacific Area Meeting, 42.

Layman, A. H., Jr.

See Martin, J. R., and Layman, A. H., Jr.

Lazan, B. J.

See Blatherwick, A. A., and Lazan, B. J.
See Person, N. L., and Lazan, B. J.
See Vitovec, F. H., and Lazan, B. J.

Lee, S. F.

See Sawyer, D. H., and Lee, S. F.

Leeser, D. O.

Radiation Effects on Welds and Notches in Plain-Carbon Steels, Stainless Steels and Nonferrous Alloys—Summary of Proceedings of Pacific Area Meeting, 50.

Leeser, D. O., and Delly, G. J.

Effect of Irradiation on the Notched-Bar Impact Properties of Some Plain-Carbon Steels—Summary of Proceedings of Pacific Area Meeting, 50.

Lent, R. P.

See Alger, J. V., Roberts, E. C., Lent, R. P., and Anderton, G. W.

Leonard, J. E.

Performance Studies of Reference-Electrodes and Their Components at High-Temperatures and Pressures—Summary of Proceedings of STP 190, 1455.

Le Poole, J. B., and van Wijk, F.

A Method for Making Positive Replicas and the Preparation of Steel Specimen for Electron Microscopy, 409.

Levin, Harry.

See Asseff, P. A., Levin, Harry, Sprague, H. G., and Cooperators.

Lieblein, J.

Discussion, 1117.

Liggett, F. S.

See Keller, J. L., and Liggett, F. S.

Lindeneau, G. D.

See Smith, C. R., and Lindeneau, G. D.

Lindskog, G.

See Cadling, L., and Lindskog, G.

Loane, C. M.

See Ries, H. E. Cook, H. D., and Loane, C. M.

Lochen, R. E.

See Matters, R. G., and Lochen, R. E.

Loftus, J.

See Robertson, A. F., Gross, D., and Loftus, J.

Long, F. A.

See Paul, M. A., and Long, F. A.

Lootens, W. F.

Soldering in Semiconductor Devices—Summary of Proceedings of *STP 189*, 1138.

Lorman, William R.

Discussion. Published in *ASTM BULLETIN* No. 212, Feb., 61 (TP49).

Discussion, 1423.

Lovewell, C. E.

Discussions, 1158, 1213.

Lukens, H. R., Jr.

See Guinn, V. P., Lukens, H. R., Jr., and Wagner, D. C.

Lula, R. A.

See Renshaw, W. G., and Lula, R. A.

See Walsh, R. A., Cook, R. L., and Lula, R. A.

Lumsden, G. Q.

Wood Poles for Communication Lines—Summary of Proceedings of Pacific Area Meeting, 40.

Lutz, W. H.

ACR Notes—The Importance of Unimportant Details. Published in *ASTM BULLETIN*, No. 212, Feb., 19.

Luxford, R. F., and Erickson, E. C. O.

Rigidity and Strength of Houses Built of Plywood Stressed-Cover Panels—Summary of Proceedings of Pacific Area Meeting, 43.

M**MacDonald, R. J., Carlson, R. L., and Lankford, W. T.**

The Effects of Strain Rate and Temperature on the Stress-Strain Relations of Deep-Drawing Steel, 704, (R). Disc., 721.

MacIntosh, R. M.

Corrosive Fluxes—Their Role in Soldering—Summary of Proceedings of *STP 189*, 1138.

Mackintosh, Albyn.

Tests of Reinforced-Concrete Masonry Beams—Summary of Proceedings of Pacific Area Meeting, 45.

Mallatt, R. C., Demkovich, P. A., and Cropper, W. V.

The ASTM Copper-Strip Corrosion Standards. Published in *ASTM BULLETIN*, No. 218, Dec., 49 (TP227).

Maloney, John W.

Universal Soil Testing Machine—Summary of Proceedings of Pacific Area Meeting, 44.

Maltz, J.

Discussion, 753.

Mample, A. Z.

Soldering Fluxes and Flux Principles—Summary of Proceedings of *STP 189*, 1138.

Manjoine, M. J.

Discussion. Published in *ASTM BULLETIN*, No. 211, Jan., 60 (TP32).

Manley, L. W., Snyder, G. H. S., and Mesina, N. V.

Fire Resistant Turbine Fluids—Summary of Proceedings of Pacific Area Meeting, 34.

Manson, S. S.

Discussion, 614.

Manuel, R. W.

Discussion, 890.

Maraoka, J.

See Vind, Harold, Maraoka, J., Casey, Joan, and Hochman, H.

Markwardt, L. J.

Need for Research on Wood Poles—Summary of Proceedings of Pacific Area Meeting, 40.

Markwardt, L. J., and Youngquist, W. G.

Tension Test Methods for Wood, Wood-Base Materials and Sandwich Constructions—Summary of Proceedings of *STP 194*, 1456.

Martin, J. R., and Layman, A. H., Jr.

Development and Application of the Effective Specific Gravity of Bituminous Coated Aggregates—Summary of Proceedings of *STP 191*, 1398.

Mason, Harold G.

Field Tests on Laterally Loaded Instrumented Piles—"Fixed Head" Loadings in Sand—"Free Head" Loadings in Clay—Summary of Proceedings of Pacific Area Meeting, 39.

Massonnet, Ch.

The Effect of Size, Shape, and Grain Size on the Fatigue Strength of Medium Carbon Steel (R), 954.

Mastin, R. G.

Practices for Determining the Expected Life of Used Turbine Oils—Summary of Proceedings of Pacific Area Meeting, 36.

Mather, Bryant.

The Partial Replacement of Portland Cement in Concrete—Summary of Proceedings of Pacific Area Meeting, 49.

Discussion, 1210.

Mather, Katharine.

Discussion, 1211.

Mathes, K. N.

Materials Tests—Source and Use. Published in ASTM BULLETIN, No. 217, Oct., 41.

Matson, E. E.

A Look Ahead at Wood Pole Production in Relation to the Forest Resource—Summary of Proceedings of Pacific Area Meeting, 40.

Matsuda, T.

See Weisman, M. H., Melill, J., and Matsuda, T.

Matters, R. G.

Discussion, 590.

Matters, R. G., and Lochen, R. E.

Materials for Helical Compression Springs for Use at Constant Deflection from 600 to 1400 F, 672. Disc., 683.

Maurseth, Ray A., and Mitchell, Stanley N.

Experiences with Electrical Resistivity Surveys on Foundation and Subsurface Investigations in Southern California—Summary of Proceedings of Pacific Area Meeting, 44.

Maxwell, Bryce.

An Apparatus for Measuring the Response of Polymeric Materials to an Oscillating Strain. Published in ASTM BULLETIN, No. 215, July, 76 (TP132) (R).

Maxwell, L. H.

See Wachtman, J. B., Jr., and Maxwell, L. H.

McAdams, M. M.

See Williams, F. M., Grimmer, L. E., McAdams, M. M., and Yanoshek, S.

McBurney, J. W.

The Effect of Weathering on Certain Mortars Exposed in Brick Masonry With and Without Caps and Flashings, 1273. Disc., 1283.

McCall, D.

See Davis, R. E., Troxell, G. E., McCall, D., and McCann, R. A.

McCann, D.

See Davis, R. E., Troxell, G. E., McCall, D., and McCann, R. A.

McClintock, F. A.

Discussion, 1047, 1117.

McCoy, W. J., and Helms, S. B.

Effect of Storage on Air-Entraining Cements—Summary of Proceedings of Pacific Area Meeting, 47.

McCrachin, F. L.

See Smith, J. C., McCrachin, F. L., and Schiefer, H. F.

McGarry, Frederick J.

See Dorsey, James, McGarry, Frederick J., and Dietz, Albert G. H.

McGee, S. W., and Sump, C. H.

Nitrided Chromium for Wear Applications. Published in ASTM BULLETIN, No. 217, Oct. 58 (TP192).

McGonnagle, W. J., and Beck, W. N.

An Ultrasonic Scanning and Recording System, 1415. Disc., 1423.

McLean, Garnett, and Siess, C. P.

Relaxation of High-Tensile-Strength Steel Wire for Use in Prestressed Concrete. Published in ASTM BULLETIN, No. 211, Jan., 46 (TP18) (R); Disc., No. 214, May, 65 (TP123).

McLeod, Norman W.

Evaluating Relationships Between Moisture Content, Density, and Void Properties of Soils, 1372. Disc., 1396.

McPherson, A. T.

ACR Notes—Student Research on ASTM Problems. Published in ASTM BULLETIN, No. 217, Oct., 31.

McRae, J. L.

Specific Gravity and Voids Relationships in Bituminous Pavement Mix Design—Summary of Proceedings of STP 191, 1398.

Meahl, Harry R.

Dissipation Factor and Dielectric Constant versus Frequency for Four Popular Insulating Materials, 312.

Melill, J.

See Weisman, M. H., Melill, J., and Matsuda, T.

Mendizza, A.

The Standard Salt-Spray Test—Is it a Valid Acceptance Test?—Summary of Proceedings of STP 197, 54.

See Sample, C. H., Mendizza, A., and Teel, R. B.

Menzies, Robert, and Turner, Ruth.

The Distribution and Importance of Marine Wood Borers in the United States—Summary of Proceedings of Pacific Area Meeting, 36.

Messina, N. V.

See Manley, L. W., Snyder, G. H. S., and Messina, N. V.

Mielenz, R. C.

Discussion, 1208, 1228.

Migel, Hamilton.

Magnetic Particle and Penetrant Testing Procedures—Summary of Proceedings of Pacific Area Meeting, 38.

Miles, T. K.

See Griffin, R. L., Miles, T. K., Penther, C. J., and Simpson, W. C.

Miller, E. S.

See Johns, A. A., Jr., and Miller, E. S.

Miller, E. S., and Johns, A. A., Jr.

Dip Soldering Printed Circuits—Summary of Proceedings of *STP 189*, 1138.

Miller, J. R.

See Perkins, W. D., Miller, J. R., and Moser, J. H.

Miller, Oscar O.

Discussions, 518, 566, 660.

Millson, J. C.

Discussion, 1118.

Minnick, L. John.

Discussion, 1207, 1316.

Minor, H. B.

See Nixon, A. C., Minor, H. B., and Rudy, T. P.

Mitchell, Stanley N.

See Maurseth, Ray A., and Mitchell, Stanley N.

Mochel, Norman L.

Government and Industry Standardization—Are Our Objectives the Same? Published in *ASTM BULLETIN*, No. 214, May, 31.

Discussion. Published in *ASTM BULLETIN*, No. 211, Jan., 60 (TP32).

Monismith, C. L.

See Vallerga, B. A., Seed, H. B., Monismith, C. L., and Cooper, R. S.

Monkman, F. C., and Grant, N. J.

An Empirical Relationship Between Rupture Life and Minimum Creep Rate in Creep-Rupture Tests (*R*), 593. Disc., 605.

Moore, A. A., and Gusack, J. A.

An Autographic Bearing-Strength Test, and Typical Test Values on Some Magnesium Alloys at Room- and Elevated-Temperatures, 834.

Moore, C. C.

See Broughten, J. L., and Moore, C. C.

Morris, M. D.

Discussion, 1300.

Moser, J. H.

See Perkins, W. D., Miller, J. R., and Moser, J. H.

Moyer, R. G.

See Brennan, E. W., and Moyer, R. G.

Murphy, W. F., and Paine, S. H.

Fast Neutron Effects on Tensile and Hardness Properties of Type 347 Stainless Steel—Summary of Proceedings of Pacific Area Meeting, 50.

Mutchler, Mary K.

See Reinhart, Frank W., and Mutchler, Mary K.

Muvdi, B. B.

See Sachs, G. Muvdi, B. B., and Klier, E. P.

N

Nason, H. K.

ACR Notes—Research on Research. Published in *ASTM BULLETIN*, No. 214, May, 15.

Newacheck, R. L., Kohl, J., and Forrest, D. L.

Thickness and Concentration Gaging With Radioactive Isotopes—Summary of Proceedings of Pacific Area Meeting, 52.

Neville, O. K.

Determination of Napthalene in Coal Tar by Dilution Analysis—Summary of Proceedings of Pacific Area Meeting, 52.

Nixon, A. C., Minor, H. B., and Rudy, T. P.

Induction System Reactions—Liquid or Vapor? Summary of Proceedings of Pacific Area Meeting, 46.

Norris, Charles B., James, William L., and Drow, John T.

A Strain Gage for the Measurement of Strains in Adhesive Bonds. Published in *ASTM BULLETIN*, No. 218, Dec., 40 (TP218).

Nudelman, Harvey B., Sump, Cord, H., and Troy, Walter C.

The Development of Metal-Bonded Carbon Bearings. Published in *ASTM BULLETIN*, No. 213, Apr., 62 (TP72) (*R*).

Nussdorfer, T. J., and White, D. O.

A New Atmospheric Cycling Test for Corrosion Study. Published in *ASTM BULLETIN*, No. 214, May, 61 (TP119).

Nye, J. R.

Corona Detection and Measurement at 60 Cycles—Summary of Proceedings of *STP 198*, 1458.

O

O'Connor, D. T., and Criscuolo, E. L.

The Quality of Radiographic Inspection. Published in *ASTM BULLETIN*, No. 213, Apr., 53 (TP63) (*R*).

Ogden, H. R.

See Holden, F. C., Ogden, H. R., and Jaffee, R. I.

Ogden, H. R., Holden, F. C., and Jaffe, R. I.

The Effect of Composition and Annealing Treatment on the Thermal Stability of Ti-Cr-Mo-Alloys—Summary of Proceedings of Pacific Area Meeting, 35.

Oliver, F. S., Povey, F. H., and Pinkham, T. A.

Preliminary Investigation of Proposed Pulse Method for Measuring Ionization—Summary of Proceedings of *STP 198*, 1458.

Olyphant, Murray, Jr.

Arc Resistance: Radio-Frequency Corona Resistance. Published in *ASTM BULLETIN* No. 216, Sept., 47 (TP159) (R).

Osterberg, J. O.

Vane Testing for Shear Properties of Soil—The Present Status of Vane Testing—Summary of Proceedings of *STP* 193, 1397.

P**Pace, A.**

See Holste, Richard F., Jacobs, J. E., and Pace, A.

Paine, S. H.

See Kittel, J. H., Paine, S. H., and Chiswik, H. H.

See Murphy, W. F., and Paine, S. H.

Palmer, L. A., Brown, Phillip B., and Yeomans, C. M.

A Procedure for Separately Evaluating Friction and Cohesion by a Consolidated Direct Shear Test—Summary of Proceedings of Pacific Area Meeting, 39.

Papa, Gregory.

See Rosenthal, Harold, and Papa, Gregory.

Parker, R. O., and Ziobro, R. J.

Comments on Corrections to Steam Conductivity Measurements—Summary of Proceedings of *STP* 192, 1457.

Parkinson, R. E.

Selection of Materials for Architectural Sandwich Panels—Summary of Proceedings of Pacific Area Meeting, 51.

Parris, W. M.

See Sherman, R. G., Parris, W. M., and Kessler, H. D.

Pattee, H. E., and Evans, R. M.

The Performance of Some Soft Solders at Elevated Temperatures and Pressures—Summary of Proceedings of *STP* 189, 1138.

Paul, M. A., and Long, F. A.

Indicator Acidity Functions for Nonaqueous and Mixed Solvents—Summary of Proceedings of *STP* 190, 1455.

Pedrick, Arthur S.

Nondestructive Testing on Southern Pacific Railroad—Summary of Proceedings of Pacific Area Meeting, 43.

Penther, C. J.

See Griffin, R. L., Miles, T. K., Penther, C. J., and Simpson, W. C.

Perkins, W. D., Miller, J. R., and Moser, J. H.

Direct Determination of Metals in Used Lubricating Oils by Emission Spectrography—Summary of Proceedings of Pacific Area Meeting, 42.

Perley, G. A.

See Clark, W. R., and Perley, G. A.

Person, N. L., and Lazan, B. J.

The Effect of Static Mean Stress on the Damping Properties of Materials (R), 1399. Disc., 1413.

Pessel, L.

Proposed Numerical Evaluation System for Soft Solders, Solder Fluxes, and Solderability—Summary of Proceedings of *STP* 189, 1138.

Peterson, Charles.

Report on Recent Oregon Forest Products Laboratory Tests of Cantilevered Wood Mullions Fixed in Diagonally Sheathed and Plywood Panels—Summary of Proceedings of Pacific Area Meeting, 44.

Photiadis, C. J.

The Establishment of Minimum Quality Levels of Sheet Insulation—Summary of Proceedings *STP* 188, 1459.

Pickett, C. F.

Why Paint Specifications?—Their Tests and Controls, Summary of Proceedings of Pacific Area Meeting, 52.

Pinkham, T. A.

See Oliver, F. S., Povey, F. H., and Pinkham, T. A.

Pinner, W. L.

Introduction to Symposium on Properties, Tests, and Performance of Electrodeposited Metallic Coatings—Summary of Proceedings of *STP* 197, 54.

Plimpton, F. T. P., Jr.

See Fachet, J. and Plimpton, F. T. P., Jr.

Plumtree, W. C.

See Cheorvas, W., and Plumtree, W. C.

Pocock, B. W.

Application of a Beta Ray Backscatter Thickness Gage to Traffic Paint Wear Studies—Summary of Proceedings of Pacific Area Meeting, 52.

Polivka, M.

See Kelly, J. W., Polivka, M., and Best, C. H.

Povey, F. H.

See Oliver, F. S., Povey, F. H., and Pinkham, T. A.

Preisler, J. J.

Discussion, 722.

Pritchard, L. R.

Determination of Magnesium Oxide in Portland Cement by Flame Photometry—Summary of Proceedings of Pacific Area Meeting, 47.

Proebstle, R. A.

Discussion, 1423.

Pryor, M. R.

See Summerson, T. J., Pryor, M. R., Keir, D. S., and Hogan, R. J.

Pulsiffer, D. E.

See Battalora, J. R., and Pulsiffer, D. E.

R**Ramsay, R. E., and Rappold, W. A.**

Direct-Reading Spectrographic Control of Lubricating Oil Additive Manufacture—Summary of Proceedings of Pacific Area Meeting, 42.

Ramsey, J. L.

Railroad Cleaners and Cleaning Procedures—Summary of Proceedings of Pacific Area Meeting, 45.

Rappold, W. A.

See Ramsay, R. E., and Rappold, W. A.

Raring, R. H., and Rinebolt, J. A.

A Small and Inexpensive Device for Sustained Loading Testing. Published in ASTM BULLETIN, No. 213, April, 74 (TP84).

Reed, C. E.

The Industrial Chemistry, Properties, and Applications of Silicones—Marburg Lecture—Summary of Proceedings, 19 (Issued as separate pamphlet).

Reinhart, G. C.

Development of Additives for Economy Type Locomotive Diesel Fuels—Summary of Proceedings of Pacific Area Meeting, 45.

Reinhart, F. W.

See Stock, C. R., and Reinhart, F. W.

Tension Testing of Plastics—Summary of Proceedings, STP 194, 1456.

Reinhart, Frank W., and Mutchler, Mary K.

Fluorescent Sunlamps in Laboratory Aging Tests for Plastics. Published in ASTM BULLETIN, No. 212, Feb., 45 (TP33).

Renshaw, W. G.

Discussion, 920.

Renshaw, W. G., and Lula, R. A.

The Corrosion Properties of Chromium-Nickel-Manganese Austenitic Stainless Steels, 866. Disc., 890.

Reynolds, S. I.

Test Methods for Measuring Energy in a Gas Discharge. Published in ASTM BULLETIN, No. 214, May, 51 (TP109). See also Summary of Proceedings of STP 198, 1458.

Rice, J. K.

The Use of Organic Flocculants and Flocculating Aids in the Treatment of Industrial Water and Industrial Waste Water—Summary of Proceedings of Pacific Area Meeting, 49.

Rice, J. M.

Maximum Specific Gravity of Bituminous Mixtures by Vacuum Saturation Procedure—Summary of Proceedings of STP 191, 1398.

Rice, J. W.

A Suggested Method of Testing Detergents for On-Location Rug Cleaning. Published in ASTM BULLETIN, No. 213, April, 59 (TP69).

Richards, A. P., and Clapp, William F.

Marine Exposure Tests of Wood Treated with Various Preservatives—Summary of Proceedings of Pacific Area Meeting, 36.

Richards, C. W.

See Young, J. F., and Richards, C. W.

Richards, J. T., and Smith, E. M.

Factors Affecting the Forming Properties of Several Copper Alloys in Strip Form, 807. The Properties of Beryllium Copper Strip as Affected by Cold Rolling and Heat Treating—Summary of Proceedings of Pacific Area Meeting, 49.

Ricksecker, R. E.

Discussion, 659.

Ries, H. E., Cook, H. D., and Loane, C. M.

Monolayers of Anti-Rust Additives—Summary of Proceedings of Pacific Area Meeting, 36.

Rigdon, J. H.

Evaluation of Paints and Protective Coatings for Municipal Use—Summary of Proceedings of Pacific Area Meeting, 53.

Rinebolt, J. A.

See Raring, R. H., and Rinebolt, J. A.

Ripling, E. J.

Notch Tensile Behavior of Face Centered Cubic Metals, 662.

Rittenhouse, John B.

Ignition and Stress Corrosion Cracking of Titanium in Fuming Nitric Acid—Summary of Proceedings of Pacific Area Meeting, 38.

Rizika, J. W.

See Collins, S. C., Ezekiel, F. D., Sepp, O. W., and Rizika, J. W.

Roberts, E. C.

See Alger, J. V., Roberts, E. C., Lent, R. P., and Anderton, G. W.

Robertshaw, T. L.

Discussion, 605.

Robertson, A. F., Gross, D., and Loftus, J.

A Method for Measuring Surface Flammability of Materials Using a Radiant Energy Source, 1437.

Roe, T., Jr., Hochman, H., and Holden, E. R.

Performance Tests of Heavy Metal Compounds as Marine Borer Inhibitors—Summary of Proceedings of Pacific Area Meeting, 36.

Roeloffs, R., and Garofalo, F.

A Review of Methods Employed in the Statistical Analysis of Fatigue Data (*R*), 1081.

Roffman, Eugene.

Development of Technique for the Detection of Cracks in Small Cylindrical Specimens by Eddy Current and Reluctance Methods—Summary of Proceedings of Pacific Area Meeting, 40.

Rombach, W. H.

Controlling Quality on Soldered Electrical Connections—Summary of Proceedings of *STP 189*, 1138.

Rosenow, E. R.

See Whittenberger, E. J., Rosenow, E. R., and Carney, D. J.

Rosenberg, Samuel J.

Discussion, 518, 590.

Rosenthal, Harold, and Papa, Gregory.

Rapid Method for Removal of Rubber from Cushioning Materials. Published in *ASTM BULLETIN*, No. 216, Sept., 66 (TP178).

Ross, C. W.

Preliminary Corona Resistance Test Results from IEC Activities—Summary of Proceedings of *STP 198*, 1458.

Ross, S. T.

See Sernka, R. P., and Ross, S. T.

Rostoker, W.

See Graft, W. H., and Rostoker, W.

Rozalsky, I.

Correlation of Torsional and Tensile Prestrain Effects on Fracture Properties (*R*), 621.

Rudy, T. P.

See Nixon, A. C., Minor, H. B., and Rudy, T. P.

Rufolo, A., and Winans, R. R.

Effects of Corona on Plastic Laminates. Published in *ASTM BULLETIN*, No. 214, May, 53 (TP111). See also Summary of Proceedings of *STP 198*, 1458.

Ruge, Arthur C.

Force and Weight Standards Gain New Importance in Industry. Published in *ASTM BULLETIN*, No. 218, Dec., 31 (TP209).

Ryder, E. A., and Barnes, G. C.

A Rapid Fatigue Test for Rolling Contact Materials. Published in *ASTM BULLETIN*, No. 217, Oct., 63 (TP197).

S**Sabine, Hale J.**

An Apparatus for Measuring Air-Flow Resistance of Acoustical Materials. Published in *ASTM BULLETIN*, No. 211, Jan., 29 (TP1).

Sachs, George.

Discussion, 519, 553, 702.

Sachs, G., Muvdi, B. B., and Klier, E. P.

Effect of a Number of Variables on the Fatigue Properties of High-Strength Steels—Summary of Proceedings of Pacific Area Meeting, 51.

Sachs, G., Weiss, V., and Klier, E. P.

Effects of a Number of Heat Treating and Testing Variables on the Notch Strength of 4340 Steel, 555. Disc., 565.

Sample, C. H.

The Corrosion Behavior and Protective Value of Copper-Nickel-Chromium and Nickel-Chromium Coatings on Steel—Summary of Proceedings of *STP 197*, 54.

Sample, C. H., Mendizza, A., and Teel, R. B.

A Comparison of the Corrosion Behavior and Protective Value of Electrodeposited Zinc and Cadmium Coatings on Steel—Summary of Proceedings of *STP 197*, 54.

Sawyer, D. H., and Lee, S. F.

The Effects of Revibration on Properties of Portland Cement Concrete, 1215. Disc., 1228.

Schapiro, L.

Discussion, 754.

Schapiro, Leo, and Barry, H. A.

Unalloyed Titanium Sheet is Improving—Summary of Proceedings of Pacific Area Meeting, 38.

Schatzel, R. A.

Where Do We Go From Here? Published in *ASTM BULLETIN*, No. 217, Oct., 21.

Scheule, H. J.

Fuel Factors Influencing Intake System Deposition—Summary of Proceedings of Pacific Area Meeting, 46.

Schiefer, H. J.

See Smith, J. C., McCrachin, F. J., and Schiefer, H. J.

Schneider, R. R.

See English, Morley, J., and Schneider, R. R.

Scholer, C. H.

Discussion, 1300.

Schriever, W. R.

See Dorey, D. B., and Schriever, W. R.

Schuette, E. H.

Discussion, 1011, 1121.

Schussler, M.

See Folkman, R. L., and Schussler, M.

Schwartzbart, H.

See Sheehan, J. P., and Schwartzbart, H.

Schwartzberg, F. R., Williams, N. D., and Jaffee, R. I.

Variables Effecting the Thermal Stability of Three Titanium Alloys—Summary of Proceedings of Pacific Area Meeting, 35.

Scott, Ronald L.

Chemical Polishing of Steel for Electron Metallography (*R*), 444.

Scoville, W. E., Jr.

See Chatten, C. K., Scoville, W. E., Jr. and Conant, F. S.

Seal, R. T.

See Birks, L. S., and Seal, R. T.

Seed, H. B.

See Vallerger, B. A., Seed, H. B., Monismith, C. L., and Cooper, R. S.

Seiffert, L. E., and Alexander, E. W.

Statistical Treatment of Heat-Aging Studies on Varnished Glass Cloth—Summary of Proceedings *STP* 188, 1459.

Sendroy, J., Jr.

Problems in Measurement of pH of Blood and Other Biological Fluids—Summary of Proceedings of *STP* 190, 1455.

Seniff, R. W.

Coordination of Research on Locomotive Diesel Fuels and Lubrication Oils—Summary of Proceedings of Pacific Area Meeting, 45.

Sepp, F. D.

See Collins, S. C., Ezekiel, F. D., Sepp, O. W., and Rizika, J. W.

Serafin, P. J.

Measurement of Maximum Theoretical Specific Gravity of a Bituminous Mixture by Solvent Immersion—Summary of Proceedings of *STP* 191, 1398.

Sernka, R. P., and Ross, S. T.

Electron Microstructure of Some Quenched-and-Tempered, Low-Alloy, Medium-Carbon Steels (*R*), 398.

Sessler, J. G., and Brown, W. F., Jr.

Notch and Smooth Bar Stress-Rupture Characteristics of Several Heat-Resistant Alloys in the Temperature Range Between 600 and 1000 F (*R*), 738. Disc., 753.

Sheehan, J. P., and Schwartzbart, H.

Impact Properties of Quenched-and-Tempered Alloy Steels, 483. Disc., 518.

Sherby, O. D., Trozera, T. A., and Dorn, J. E.

The Effects of Creep Stress History at High

Temperatures on the Creep of Aluminum Alloys (*R*), 789. Disc., 805.

Sherdon, A. W.

Discussion. Published in *ASTM BULLETIN*, No. 216, Sept., 60 (TP172).

Sheridan, M. L., and Merriman, H. R.

Conclusions Derived from Empirical Studies of Bonded Details for Sandwich Construction—Summary of Proceedings of Pacific Area Meeting, 47.

Sherman, Morton

Discussion. Published in *ASTM BULLETIN*, No. 214, May, 56 (TP114).

Sherman, R. G., Parris, W. M., and Kessler, H. D.

Elevated Temperature Properties of the Ti-6Al-4V Alloy—Summary of Proceedings of Pacific Area Meeting, 35.

Shockley, W. G.

Discussion, 1396.

Shuman, E. C.

Discussion, 1283.

Siess, C. P.

See McLean, Garnett, and Siess, C. P.

Simpson, W. C.

See Griffin, R. L., Miles, T. K., Penther, C. J., and Simpson, W. C.

Simpson, W. K.

Sampling of Lubricating Oil from Diesel Locomotives—Summary of Proceedings of Pacific Area Meeting, 42.

Sinclair, G. M.

See Corten, H. T., and Sinclair, G. M. Discussion, 1061.

Singleton, W. F.

A Study of the Quality of Water in the Carbon Arc Light and Water Exposure Apparatus—Summary of Proceedings of Pacific Area Meeting, 50.

Sinnott, M. J.

See Demmler, A. W., Sinnott, M. J., and Thomassen, L.

Sisco, Frank T.

ACR Notes—An Investment that Pays 100 per Cent a Year. Published in *ASTM BULLETIN*, No. 211, Jan., 23.

Sisman, O.

The Problem of Establishing Specifications for Irradiated Organic Materials—Summary of Proceedings of Pacific Area Meeting, 52.

Sisman, O., and Bopp, C. D.

A Summary of the Effect of Irradiation on Some Plastics and Elastomers—Summary of Proceedings of Pacific Area Meeting, 50.

Sisson, A. B., Straub, F. G., and Lane, R. W.
Construction and Operation of Larson-Lane Steam Purity and Condensate Analyzers—Summary of Proceedings of *STP 192*, 1457.

Skog, John B.

The Operation, Control and Application of the Infrared Weathering Machine—California Design—Summary of Proceedings of Pacific Area Meeting, 37.

See Zube, Ernest, and Skog, John B.

Smack, John.

Report on the Activities and Future Projects of the Ultrasonic Subcommittee VI of Committee E-7—Summary of Proceedings of Pacific Area Meeting, 38.

Smith, Chester R.

How Statistical Techniques Helped Achieve Better Uniformity in Unalloyed Titanium—Summary of Proceedings of Pacific Area Meeting, 38.

Smith, E. M.

See Richards, J. T. and Smith, E. M.

Smith, F. L.

The Effect of Aggregate Quality on Resistance of Concrete to Abrasion—Summary of Proceedings of Pacific Area Meeting, 49.

Smith, G. V.

Work of Panel-Joint Committee on Effect of Temperature Provides Important Data and Publications. Published in *ASTM BULLETIN*, No. 212, Feb., 23.

Smith, J. C., McCrachin, F. L. and Schiefer, H. F.

The Impact-Absorbing Capacity of Textile Yarns. Published in *ASTM BULLETIN*, No. 220, Feb., 1957, 52 (TP40).

Smith, J. E.

Tests of Deadman Anchorages in Sand—Summary of Proceedings of Pacific Area Meeting, 44.

Smith, L. G.

Engineering of Specifications for Wood Poles—Summary of Proceedings of Pacific Area Meeting, 40.

Smith, O. F.

See Hester, J. A., and Smith, O. F.

Smith, C. R., and Lindeneau, G. D.

Riveted Joints—Fatigue Strength—Summary of Proceedings of Pacific Area Meeting, 52.

Smith, W. J.

ACR Notes—A Treat to Research. Published in *ASTM BULLETIN*, No. 218, Dec., 10.

Snodden, W. J.

Metal-to-Resin Adhesion as Determined by a Stripping Test—Summary of Proceedings of Pacific Area Meeting, 51.

Snyder, Edward B., and Fantini, Ralph

Evaluation of Thermal Stability of Flexible and Insulating Sleeving. Published in *ASTM BULLETIN*, No. 218, Dec., 59 (TP237).

Snyder, L. W.

See Manley, L. W., Snyder, G. H. S., and Messina, N. V.

Soffa, L.

Discussion, 1424.

Sohl, H. C.

Non-Corrosive Fluxes, Evaluation of Spread and Corrosion Properties—Summary of Proceedings of *STP 189*, 1138.

Sparling, Rebecca H.

Testing in the Guided Missile Industry—Summary of Proceedings of Pacific Area Meeting, 35. Also published in *ASTM BULLETIN*, No. 218, Dec., 52 (TP230).

Spessard, C. I.

Some Aspects of Testing Vinyl Metal Finishes—Summary of Proceedings of Pacific Area Meeting, 52.

Sprague, H. G.

See Asseff, P. A., Levin, Harry, Sprague, H. G., and Cooperators.

Spring, S.

Control of Phosphatizing Systems—Summary of Proceedings of Pacific Area Meeting, 53. Recommended Practices for Cleaning Prior to Electroplating—Summary of Proceedings of *STP 197*, 54.

Stark, Leston B.

Properties and Fabrication Characteristics of Wrought Titanium Products—Summary of Proceedings of Pacific Area Meeting, 35.

Starr, W. T.

Corona Resistance Test Method for Laminates Molded and Cast Materials—Summary of Proceedings of *STP 198*, 1458.

Starr, W. L.

See Hitchcock, R. D., and Starr, W. L.

Steele, R. C.

Recent Developments in Sandwich Construction Including Heat Resistant Materials—Summary of Proceedings of Pacific Area Meeting, 51.

Stephens, D. W., and Brown, C. B.

Choice of Background for Detergent Efficiency Evaluation. Published in *ASTM BULLETIN*, No. 214, May, 45 (TP103).

Stevens, J. M.

Sandwich in the Design of Helicopters—Summary of Proceedings of Pacific Area Meeting, 47.

Sticha, E. A.

Discussion, 683.

Stickley, G. W.

Discussion, 1121.

- Stock, C. R., and Reinhart, F. W.**
Standards for Plastics—Their Impact on Industry—Summary of Proceedings of Pacific Area Meeting, 34.
- Stoll, U. W.**
Hydrophobic Cement—Summary of Proceedings of Pacific Area Meeting, 47.
- Straub, F. G.**
See Sisson, A. B. Straub, F. G., and Lane, R. W.
- Strella, Stephen.**
Vibrating Reed Test for Plastics. Published in ASTM BULLETIN, No. 214, May, 47 (TP105).
- Stringfield, Raymond B.**
Specifications Should be Used in Buying Rubber Parts—Summary of Proceedings of Pacific Area Meeting, 35.
- Stulen, F. B.**
Discussion, 1119.
- Summerson, T. J., Pryor, M. J., Keir, D. S., and Hogan, R. J.**
Pit Depth Measurements as a Means of Evaluating the Corrosion Resistance of Aluminum in Sea Water—Summary of Proceedings of Pacific Area Meeting, 48.
- Sump, C. H.**
See McGee, S. W., and Sump, C. H.
See Nudelman, Harvey B., Sump, Cord H., and Troy, Walter C.
- Supnik, R. H.**
See Adams, C. H., and Supnik, R. H.
- Swayze, Myron A.**
Discussion. Published in ASTM BULLETIN, No. 212, Feb., 62 (TP50).
- T**
- Tangenberg, H.**
Tension Testing of Rubber—Summary of Proceedings of STP 194, 1456.
- Teel, R. B.**
See Sample, C. H., Mendizza, A., and Teel, R. B.
- Tenney, Gerold H.**
Nondestructive Testing of Heavy Metals—Summary of Proceedings of Pacific Area Meeting, 43.
- Thomas, E. R.**
Chromatography of Lubricating Oils for Diesel Locomotives—Summary of Proceedings of Pacific Area Meeting, 42.
- Thomas, J. G.**
See Jones, J. B., and Thomas, J. G.
- Thomassen, L.**
See Demmler, A. W., Sinnott, M. J., and Thomassen, L.
- Thompson, J.**
See Binder, W. O., Thompson, J., and Bishop, C. R.
- Thorn, F. C.**
Discussion. Published in ASTM BULLETIN, No. 211, Jan., 32 (TP4).
- Thurston, R. C. A.**
Discussion, 1048.
- Timms, A. G., and Grieb, W. E.**
Use of Fly Ash in Concrete (R), 1139. Disc., 1158.
- Timm, L. J.**
Quantity Level Cannot be Determined by "Go" "No Go" Gauge—Summary of Proceedings STP 188, 1459.
- Torrey, M. N., and Gohn, G. R.**
A Study of Statistical Treatments of Fatigue Data (R), 1091. Disc., 1117.
- Townsend, J. R.**
Discussion, 737.
- Trexler, M. V.**
See Harris, J. C., Kramer, M. G., and Trexler, M. V.
- Troxell, G. E.**
See Davis, R. E., Troxell, G. E., McCall, D., and McCann, R. A.
- Troy, Walter C.**
See Nudelman, Harvey B., Sump, Cord H., and Troy, Walter C.
- Trozero, T. A.**
See Sherby, O. D., Trozero, T. A., and Dorn, J. E.
- Truell, John.**
Recent Developments in the Use of Ultrasonic Attenuation and Velocity Measurements in the Study of Properties of Materials—Summary of Proceedings of Pacific Area Meeting, 40.
- Tuckerman, A. J.**
Surface Treatments for Metals Prior to Painting—Summary of Proceedings of Pacific Area Meeting, 51.
- Turner, J. O.**
Discussion, 944.
- Turner, Ruth.**
See Menzies, Robert, and Turner, Ruth.
- U**
- Underwood, E. E.**
Discussion, 605.
- V**
- Vallerga, B. A., Seed, H. B., Monismith, C. L., and Cooper, R. S.**
Effect of Shape, Size and Surface Roughness of Aggregate Particles on the Strength of Granular Materials—Summary of Proceedings of Pacific Area Meeting, 37.

Van Echo, J. A.

Discussion. Published in ASTM BULLETIN, No. 211, Jan., 60 (TP32).

Vannoy, W. G.

Traffic Paints—Accelerated Settling Test. Published in ASTM BULLETIN, No. 216, Sept., 56 (TP168).

Van Valkenburg, H. E.

Ultrasonic Reflectoscope Calibration Techniques—Summary of Proceedings of Pacific Area Meeting, 43.

van Wijk, F.

See Le Poole, J. B., and van Wijk, F.

Verbeck, George.

Carbonation of Hydrated Portland Cement—Summary of Proceedings of Pacific Area Meeting, 47.

Vincent, J. A.

See Furby, N. W., Hanly, F. J., and Vincent J. A.

Vind, Harold, Maraoka, J., Casey, Joan, and Hochman, H.

The Importance of the Local Borer Species in Specifying Agents for Protecting Wood from Marine Borers—Summary of Proceedings of Pacific Area Meeting, 36.

Vitovec, F. H. and Lazan, B. J.

Axial Stress Fatigue, Creep, and Rupture Properties of Unnotched and Notched Specimens of Heat Resistant Alloys—Summary of Proceedings of Pacific Area Meeting, 52.

Vollmecke, A. R.

Full Scale Wing Fatigue Testing—Summary of Proceedings of Pacific Area Meeting, 52.

von Fuchs, G. H.

Evaluation and Performance of Turbine Oils—Summary of Proceedings of Pacific Area Meeting, 34.

W**Wachtman, J. B., Jr., and Maxwell, L. H.**

A Bend-Test Method of Determining the Stress Required to Cause Creep in Tension. Published in ASTM BULLETIN, No. 211, Jan., 38 (TP10).

Wagner, D. C.

See Guinn, V. P., Lukens, H. R., Jr., and Wagner, D. C.

Waisman, J. L.

The Effect of Forming on Mechanical Properties—Summary of Proceedings of Pacific Area Meeting, 53.

Waldman, L. A., and Cohen, P.

Fretting Wear of Zircaloy-2 Pellets in High Temperature Water, 891.

Waldorf, S. K.

Simple Devices for Capping Compression-

Test Samples. Published in ASTM BULLETIN, No. 216, Sept., 67 (TP179).

Waller, H. Fred, Jr.

The Unconfined Compression Test of Bituminous Mixtures. Published in ASTM BULLETIN, No. 212, Feb., 56 (TP44).

Walsh, R. A., Cook, R. L., and Lula, R. A.

The Mechanical Properties of Type 201 Chromium - Nickel - Manganese Stainless Steel Sheet, 923. Disc., 944.

Wardell, R.

Discussion, 890.

Watz, J. A.

See Clapper, R. B., and Watz, J. A.

Weaver, J. C.

Progress Review of Subcommittee IX—Summary of Proceedings of Pacific Area Meeting, 50.

Webber, A. C.

Introduction to Symposium on Tension Testing of Nonmetallic Materials—Summary of Proceedings of STP 194, 1456.

Summary of Symposium on Tension Testing of Nonmetallic Materials—Summary of Proceedings of STP 194, 1456.

Weber, K. H.

See Endicott, H. S., and Weber, K. H.

Weisman, M. H., Melill, J., and Matsuda, T.

Uni-Directional Axial Tension Fatigue Tests of Beryllium Copper and Several Precipitation Hardening Corrosion Resistant Steels, 53.

Weiss, V.

See Sachs, G., Weiss, V., and Klier, E. P.

Welter, Georges.

See Dubuc, Julien, Welter, Georges, and Krivobok, V. N.

Wessel, E. T.

Tension Testing Apparatus for the Temperature Range -320 F to -452 F. Published in ASTM BULLETIN, No. 211, Jan., 40 (TP12) (R).

A Tensile Study of the Brittle Behavior of a Rimmed Structural Steel, 540. Disc., 553. Discussion, 565, 586, 699, 722.

Westgate, M. W.

Report on Activities of Subcommittee XII on Latex and Emulsion Paints—Summary of Proceedings of Pacific Area Meeting, 50.

Wetzel, F. H.

The Characterization of Pressure-Sensitive Adhesives. Published in ASTM BULLETIN, No. 221, April, 1957, 64 (TP72).

Whidden, P.

Discussion, 1118.

Whitby, L.

See Wray, R. I., and Whitby, L.

White, C. R.

The Use of Vibratory Compactors on Granular Base Courses—Summary of Proceedings of Pacific Area Meeting, 41.

White, D. O.

See Nussdorfer, T. J., and White, D. O.

Whiteneck, L. L.

A Method for the Evaluation of Protective Coatings on Metal Surfaces in Marine Environments—Summary of Proceedings of Pacific Area Meeting, 53.

Whitney, J. E., Chandler, E. M., Gates, J. E., and Calkins, G. D.

A Radiation Effects Program—Summary of Proceedings of Pacific Area Meeting, 48.

Whittenberger, E. J., Rosenow, E. R., and Carney, D. J.

Effect of Composition and Heat Treatment on Impact Properties of AISI Types 403 and 410 Stainless Steel, 568. Disc., 586.

Williams, F. M., Grimmer, L. E., McAdams, M. M., and Yanoshek, S.

Measurement of Bituminous Concrete Core Specific Gravities and Specific Gravities of Bituminous Coated Coarse Aggregates by Means of a Volumeter—Summary of Proceedings of STP 191, 1398.

Williams, H. R.

Industrial Survey of Paste Solder Alloys—Summary of Proceedings of STP 189, 1138.

Williams, N. D.

See Schwartzberg, F. R., Williams, N. D., and Jaffee, R. I.

Williams, W. L.

Gray Tin Formation in Soldered Joints Stored at Low Temperature—Summary of Proceedings of STP 189, 1138.

Willis, T. F.

Discussion, 1254.

Wilson, J. C.

See Berggren, R., Dismuke, C., Feldman, M. J. and Wilson, J. C.

Wilson, J. C., and Berggren, R. G.

Will ASTM Standards be Influenced by Radiation Effects in Metals?—Summary of Proceedings of Pacific Area Meeting, 52.

Wilson, T. C.

Industrial Waste Problems in Southern California—Summary of Proceedings of Pacific Area Meeting, 49.

Winans, R. R.

See Rufolo, A., and Winans, R. R.

Winniford, R. S.

Reproducibility in Oven Heat Tests for Paving Asphalts—Summary of Proceedings of Pacific Area Meeting, 37.

Winterton, K.

Discussion, 1413.

Wray, R. I., and Whitby, L.

Proposed Methods for the Preparation for Painting of Light Metal Alloy Surfaces—Summary of Proceedings of Pacific Area Meeting, 50.

Wright, W. A.

The Viscosity-Temperature Function. Published in ASTM BULLETIN, No. 215, July, 84 (TP140).

Wood, L. W.

Testing Poles for the American Society for Testing Materials—Summary of Proceedings of Pacific Area Meeting, 40.

Range in Strength Qualities of Dimension Lumber—Summary of Proceedings of Pacific Area Meeting, 46.

Woolf, D. O.

An Improved Sulfate Soundness Test for Aggregates. Published in ASTM BULLETIN, No. 213, April, 77 (TP87).

Wyman, L. L.

The New ASTM Grain-Size Methods. Published in ASTM BULLETIN, No. 215, July, 59.

Y**Yanoshek, S.**

See Williams, F. M., Grimmer, L. E., McAdams, M. M., and Yanoshek, S.

Yeomans, C. M.

See Palmer, L. A., Brown, Philip B., and Yeomans, C. M.

Young, J. F., and Richards, C. W.

Evaluation of Rubber Deterioration by Means of Radioisotopes—Summary of Proceedings of Pacific Area Meeting, 51.

Youngquist, W. G.

See Markwardt, L. J., and Youngquist, W. G.

Z**Ziobro, R. J.**

See Parker, R. O., and Ziobro, R. J.

Zube, Ernest, and Skog, John B.

Correlation Between Laboratories on Results of ASTM Tests for Asphalts—Summary of Proceedings of Pacific Area Meeting, 37.

SUBJECT INDEX

VOLUME 56

A

- Acoustical Materials
 - air flow resistance
 - apparatus (Sabine). Published in ASTM BULLETIN, No. 211, Jan., 29 (TP1).
 - Report of Comm. C-20, 230.
- Adhesives
 - Report of Comm. D-14, 337.
- Aggregates
 - bituminous coated
 - Symposium on Specific Gravity of Bituminous Coated Aggregates. Summary of Proceedings of STP 191, 1398:
 - development and application of effective specific gravity (Martin and Layman).
 - maximum specific gravity by vacuum saturation procedure (Rice).
 - measurement of specific gravity
 - by means of a volumeter (Williams, Grimmer, McAdams, and Yanoshek).
 - by solvent immersion (Serafin).
 - role of specific gravity in design and control of mixtures (Carpenter).
 - specific gravity and voids relationships in mix design (McRae).
 - concrete
 - Report of Comm. C-9, 208.
 - sulfate soundness test (Woolf). Published in ASTM BULLETIN, No. 213, Apr., 77 (TP87).
- Aging
 - plastics
 - fluorescent sunlamps (Reinhart and Mutchler). Published in ASTM BULLETIN, No. 212, Feb., 45 (TP33).
- Air Flow Resistance
 - acoustical materials
 - apparatus (Sabine). Published in ASTM BULLETIN, No. 211, Jan., 29 (TP1).
- Aluminum
 - castings
 - effect of geometry on properties (Johnson and Bishop), 724. Disc. 737.
 - corrosion resistance in sea water
 - evaluation by pit depth measurements (Summerson, Pryor, Keir, and Hogan). Summary of Proceedings of Pacific Area Meeting, 48.
 - high purity
 - fatigue-effect of temperature and frequency (Dorn). Summary of Proceedings of Pacific Area Meeting, 53.
 - proposed method
 - Report of Comm. D-1 (appendix), 245.
 - Report of Comm. B-1, 146.
 - Report of Comm. B-6, 164.
 - Report of Comm. B-7, 168.
 - Report of Comm. E-2, 378.
- Annual Meeting
 - Report of Board of Directors, 60.
 - Summary of Proceedings of Fifty-ninth Annual Meeting, 1.
- Anodic Coatings
 - proposed method
 - Report of Comm. D-1 (appendix), 245, 249.
- Antifreezes
 - Report of Comm. D-15, 340.
- Antimony—Lead Alloys
 - creep-rupture in shear (Greenwood), 859.
- Appearance
 - Report of Comm. E-12, 467.
- Aromatic Hydrocarbons
 - Report of Comm. D-16, 342.
- Asphalt
 - durability testing
 - influence of exposure conditions (Kleinschmidt and Greenfeld). Published in ASTM BULLETIN, No. 213, Apr., 69 (TP79).
 - Report of Comm. D-4, 289.
 - Report of Comm. D-8, 303.
- Atmospheric Analysis
 - Report of Comm. D-22, 369.
- Atomic Energy
 - blueprints for a peaceful atom. Published in ASTM BULLETIN, No. 214, May, 33.
- Automobiles
 - materials of the future (Boegehold). Published in ASTM BULLETIN, No. 218, Dec., 18.
 - Published in Metals Progress, Am. Soc. Metals, Sept., 1956, 103.
- Awards of Merit
 - Summary of Proceedings of Fifty-ninth Annual Meeting, 6.

B

- Bast and Leaf Fibers
 - Report of Comm. D-13, 332.
- Bearings
 - carbon, metal bonded (Nudelman, Sump, and Troy). Published in ASTM BULLETIN, No. 213, Apr., 62 (TP72) (R).
- Bituminous Materials
 - Report of Comm. D-4, 289.
 - Report of Comm. D-8, 303.
- Bituminous Mixtures
 - compression test (Waller). Published in ASTM BULLETIN, No. 212, Feb., 56 (TP44).

- Board of Directors
Report of Board of Directors, 60.
- Brass
Report of Comm. B-5, 158.
Report of Comm. B-6, 164.
- Brick
Report of Comm. C-15, 224.
weathering index. Published in ASTM BULLETIN, No. 217, Oct., 39.
- Bronze
Report of Comm. B-5, 158.
- Building Constructions
Report of Comm. E-6, 460.
- Building Design
seismic and shock loading. Summary of Proceedings of Pacific Area Meeting, *STP* 209, 44:
cantilevered wood mullions fixed in diagonally sheathed and plywood panels (Peterson).
full-size structural wood diaphragms
State of California and Army engineers tests (Johnson).
lateral forces (Degenkolb).
school building (Bolin).
see also Wood, glued-laminated constructions
- Building Stone
natural
Report of Comm. C-18, 229.
- C**
- Cable
Report of Comm. B-1, 146.
- Capping
compression test samples (Waldorf). Published in ASTM BULLETIN No. 216, Sept., 67 (TP179).
- Carbon Black
methods of testing. Published in ASTM BULLETIN, No. 215, July, 51.
- Carnauba Wax Solubility Test
accuracy and usefulness. Published in ASTM BULLETIN, No. 214, May, 27.
- Cast Iron
Report of Comm. A-3, 127.
Report of Comm. A-7, 138.
- Cellulose
carboxymethylcellulose
Report of Comm. D-23, 370.
- Cement
oxychloride, magnesium
Report of Comm. C-2, 198.
oxysulfate, magnesium
Report of Comm. C-2, 198.
properties of gypsum
and role of calcium sulfate (Hansen).
Published in ASTM BULLETIN, No. 212, Feb., 66 (TP54).
Papers on Cement and Concrete.
Summary of Proceedings of Pacific Area Meeting, *STP* 205, 47:
air-entraining cements
effect of storage (McCoy and Helm).
chemical reactivity in concrete
alkali aggregate phase (Hester and Smith).
Report of Comm. C-1, 194.
- sulfate resistance. Published in ASTM BULLETIN, No. 212, Feb., 37.
hydrophobic cement (Stoll).
portland cement
carbonation of hydrated (Verbeck).
determination of magnesium oxide by flame photometry (Pritchard).
testing for inherent strength (Swayze). Discussion. Published in ASTM BULLETIN, No. 212, Feb., 61 (TP49).
thermal insulating
Report of Comm. C-16, 226.
water-soluble alkali (Ellingson, Gillam, and Kopanda). Published in ASTM BULLETIN, No. 212, Feb., 63 (TP51).
- Cemented Carbides
Report of Comm. B-9, 188.
- Ceramics
metal coatings
Report of Comm. C-22, 234.
- Chemical Analysis
Report of Comm. E-2, 378.
Report of Comm. E-3, 385.
- Chemical Resistant Units
Report of Comm. C-15, 224.
- Clay Pipe
Report of Comm. C-4, 200.
- Coal
Report of Comm. D-5, 295.
- Coal Plastometer
(Hills). Published in ASTM BULLETIN, No. 218, Dec., 34 (TP212).
- Coatings
anodic
Report of Comm. B-7, 168.
ceramic
Report of Comm. C-22, 234.
electrodeposited
see also Electrodeposited
metallic coatings.
Report of Comm. B-8, 186.
Report of Subcommittee II of Comm. B-8, 187.
metal
Report of Comm. A-5, 130.
protective
Report of Comm. C-16, 226.
- Coke
Report of Comm. D-5, 295.
- Color
definitions, appearance
Report of Comm. E-12 (appendix), 468.
- Compression
chromium-nickel-manganese
stainless sheet steel (Walsh, Cook, and Lula), 923. Disc., 944.
metals. Published in ASTM BULLETIN, No. 215, July, 61.
- Concrete
aggregates
Report of Comm. C-9, 208.
correlation of sonic properties with creep and relaxation (Chang and Kessler), 1257.
freezing-and-thawing
automatic equipment and comparative test results (Arni, Foster and Clevenger), 1229. Disc., 1254.

- Papers on Cement and Concrete.
 Summary of Proceedings of Pacific Area Meeting, *STP 205*, 49:
 hardened
 determination of composition by a physical method (Kelly, Polivka, and Best).
 prestressed expanded shale beams
 short-time and sustained load tests (Davis, Troxell, McCall, and McCann).
 portland cement
 partial replacement of (Mather).
 resistance to abrasion
 effect of aggregate quality (Smith).
 testing fly ash (Brink and Halstead), 1161 (*R*).
 Disc., 1207.
 use of fly ash (Timms and Grieb), 1139 (*R*).
 Disc., 1158.
 portland cement
 effect of revibration (Sawyer, Lee), 1215.
 Disc., 1228.
- Concrete Masonry Units
 Report of Comm. C-15, 224.
- Concrete Pipe
 Report of Comm. C-13, 220.
- Conditioning
 Report of Comm. E-1, 372.
- Conductors
 construction and use (Gilbo). Published in *ASTM BULLETIN*, No. 212, Feb., 68 (TP56).
 Report of Comm. B-1, 146.
- Consistency
 Report of Comm. E-1, 372.
- Contact Materials
 Report of Comm. B-4, 155.
- Copper
 beryllium-copper
 uni-directional axial tension fatigue tests (Weisman, Melill, and Matsuda). Summary of Proceedings of Pacific Area Meeting, 53.
 beryllium copper strip
 effect of cold rolling and heat treating on properties (Richards and Smith). Summary of Proceedings of Pacific Area Meeting, 49.
 Report of Comm. B-2, 152.
 Report of Comm. B-5, 158.
- strip
 forming properties (Richards and Smith), 807.
- structural chemistry and metallurgy
 Gillett Memorial Lecture (Crampton). Summary of Proceedings, 12, also Summary of Proceedings of Pacific Area Meeting, 48.
- wire
 Report of Comm. B-1, 146.
- Corona
 arc resistance (Olyphant). Published in *ASTM BULLETIN*, No. 216, Sept., 47 (TP159) (*R*).
 effects on plastic laminates (Rufolo and Winans). Published in *ASTM BULLETIN*, No. 214, May, 53 (TP111).
 measuring energy in gas discharge (Reynolds). Published in *ASTM BULLETIN*, No. 214, May, 51 (TP109).
- Symposium. Summary of Proceedings of *STP 198*, 1458:
 detection and measurement at sixty cycles (Nye).
 effects on plastic laminates (Rufolo and Winans).
 introduction (Curdts).
 proposed pulse method for measuring ionization (Oliver, Povey, and Pinkham).
 resistance test
 method for laminates, molded and cast materials (Starr).
 results from IEC activities (Ross).
 test methods in a gas discharge (Reynolds).
- Corrosion
 atmospheric cycling test (Nussdorfer and White). Published in *ASTM BULLETIN*, No. 214, May, 61 (TP119).
 chromium-nickel-manganese
 stainless steel sheet (Walsh, Cook, and Lula), 923. Disc., 944.
 copper-strip standards (Cropper). Published in *ASTM BULLETIN*, No. 218, Dec., 49 (TP229).
 electrodeposited coatings
 Report of Comm. B-8, 186.
 Report of Subcommittee II of Comm. B-8, 187.
 intergranular
 low-carbon austenitic chromium-manganese-nickel steels. (Binder, Thompson, and Bishop), 903. Disc., 920.
 Report of Advisory Comm. on Corrosion, 191.
 Report of Subcommittee XV of Comm. A-5, 130.
 Report of Comm. B-3, 154.
 Report of Comm. B-6, 164.
- stainless steel
 all-glass multiple-test apparatus (Alger, Roberts, Lent and Anderton). Published in *ASTM BULLETIN*, No. 214, May, 57 (TP115).
 chromium-nickel-manganese
 austenitic (Renshaw and Lula), 866.
 Disc., 890.
- steel
 Report of Comm. A-10, 140.
- wire
 Report of Comm. A-5, 133.
- Cotton
 Report of Comm. D-13, 332.
- Creep
 aluminum
 effect of creep
 stress history at high temperature (Sherby, Trozera, and Dorn), 789 (*R*).
 Disc., 805.
 axial loading machine (Jones and Brown). Published in *ASTM BULLETIN*, No. 211, Jan., 53 (TP25). Disc., 60 (TP32).
 tension
 bend-test determination (Wachtman and Maxwell). Published in *ASTM BULLETIN*, No. 211, Jan., 38 (TP10).
- Creep-Rupture
 empirical relationship (Monkman and Grant), 593 (*R*). Disc., 605.

D

- Damping Properties
 - static mean stress effect (Person and Lazan), 1399 (R). Disc., 1413.
- Definitions
 - appearance terms in ASTM methods. Report of Comm. E-12 (appendix), 468.
- Detergents
- corrosion test
 - vitreous enamel surfaces (Harris, Kramer, and Trexler). Published in ASTM BULLETIN, No. 216, Sept., 61 (TP173).
- efficiency evaluation
 - choice of background (Stephens and Brown). Published in ASTM BULLETIN, No. 214, May, 45 (TP103).
- Report of Comm. D-12, 328.
- rug cleaning on location
 - testing methods (Rice). Published in ASTM BULLETIN, No. 213, Apr., 59 (TP69).
- Die Castings
 - Report of Comm. B-6, 164.
- Dielectric Measurements
 - ultra high frequency insulating materials (Meahl), 312.
- District Activities
 - Report of Administrative Comm. on District Activities, 105.
- Ductility of Metals
 - brittle skins effect (Form and Baldwin), 645 (R). Disc., 659.

E

- Electrical Insulating Materials
 - corona
 - arc resistance (Olyphant). Published in ASTM BULLETIN, No. 216, Sept., 47 (TP159) (R).
 - effects on plastic laminates (Rufolo and Winans). Published in ASTM BULLETIN, No. 214, May, 53 (TP111).
 - measuring energy in gas discharge (Reynolds). Published in ASTM BULLETIN, No. 214, May, 51 (TP109).
- minimum property values
 - Symposium. Summary of Proceedings of STP 188, 1459:
 - determination of quality level—"go, no-go, gauge" (Timm).
 - dielectric breakdown
 - extremal nature (Endicott and Weber).
 - variability in sheet insulation (Graves).
 - establishment of quality levels—sheet insulation (Photiadis).
 - heat-aging studies on varnished glass cloth (Sieffert and Alexander).
 - low-temperature resistance test (Craig).
 - significance of (Craig).
 - Report of Comm. D-9, 305.
 - Report of Comm. D-20, 357 (appendix), 362.
- Electrodeposited Metallic Coatings
 - Symposium on Properties, Tests, and Performance of Electrodeposited Metallic Coatings. Summary of Proceedings of STP 197, 54:

- atmospheric exposure of lead coatings on steel (DuRose)
- corrosion behavior and protective value
 - of copper-nickel-chromium and nickel-chromium on steel (Sample).
 - of zinc and cadmium on steel (Sample, Mendizsa and Teel).
- history of ASTM Committee B-8 (Blum).
- introductory remarks (Pinner).
- methods for measurement of surface luster (Bowman).
- phosphate coating over electrodeposited zinc (Alexander).
- prior cleaning-recommended practices (Spring).
- salt-spray test (Mendizsa).
- supplementary coatings-testing methods (Harr).
- Electron Microscope
 - identification of γ' phase of nickel-base alloys (Bigelow, Amy, and Brockway), 945.
- Electron Tube Materials
 - Report of Comm. F-1, 476.
- Electronics Materials
 - Report of Comm. B-4, 155.
- Elevated Temperature
 - properties of Ti-6Al-4V alloy (Sherman, Parris, and Kessler). Summary of Proceedings of Pacific Area Meeting, 35.
- Emission Spectroscopy
 - Report of Comm. E-2, 378.
- Enamel
 - porcelain
 - Report of Comm. C-22, 234.
- Exhibit
 - 1956 Annual Meeting. Published in ASTM BULLETIN, No. 213, April, 9; No. 215, July, 12.

F

- Fatigue
 - aluminum alloys
 - crack propagation (Hunter, Fricke), 1038. Disc., 1047.
 - bending
 - effect of changing cyclic modulus (Blatherwick and Lazan), 1012. Disc., 1034.
 - cast and wrought steels (Evans, Ebert and Briggs), 979 (R). Disc., 1011.
 - direct tensile
 - elevated temperatures AMS 5765 (S-816) alloy (Hoffman), 1063.
 - medium carbon steel
 - effect of size, shape, and grain size (Massonnet), 954 (R).
 - Papers on Fatigue. Summary of Proceedings of Pacific Area Meeting, STP 203, 52, 53:
 - effect of forming on mechanical properties (Waisman).
 - full scale wing testing (Vollmecke).
 - heat resistant alloys—notched and un-notched
 - axial stress, creep and rupture properties (Vitovec and Lazan).
 - high purity aluminum

- effect of temperature and frequency (Dorn).
 magnesium alloy
 crack initiation and propagation (Clapper and Watz).
 properties of high strength steels
 effect of a number of variables (Sachs, Muvdi, and Klier).
 rehabilitation of fatigue-weary structures (Butler).
 riveted joints—strength (Smith and Lindeneau).
 uni-directional axial tension tests
 beryllium-copper and precipitation hardening corrosion resistant steels (Weisman, Melill, and Matsuda).
 Report of Comm. E-9, 463.
 rolling contact materials
 rapid test (Ryder and Barnes). Published in *ASTM BULLETIN*, No. 217, Oct., 63 (TP197).
 statistical analysis of data (Roeloffs and Garofalo), 1081 (R).
 statistical treatments (Torrey, Gohn), 1091 (R). Disc., 1117.
 titanium alloys
 notched properties (Demmler, Sinnott, and Thomassen), 1051. Disc., 1061.
 wire
 machine for investigation of influence of complex stress histories
 (Corten, Sinclair), 1124. Disc., 1136.
- Ferro-Alloys**
 Report of Comm. A-9, 139.
- Fibers**
 Report of Comm. D-13, 332.
- Filter Block**
 clay
 Report of Comm. C-15, 224.
- Finances**
 auditors' report, 79.
- Fire Tests**
 Report of Comm. E-5, 458.
- Flash Point**
 revised method
 Report of Comm. D-1 (appendix), 262.
- Force and Weight Standards**
 (Ruge). Published in *ASTM BULLETIN*, No. 218, Dec., 31 (TP209).
- Forming Properties**
 copper
 strip (Richards and Smith), 807.
- Fretting Wear**
 zircaloy—2 pellets
 high temperature water (Waldman and Cohen), 891.
- Full-Scale Tests**
 house structures. Summary of Proceedings of Pacific Area Meeting, *STP 210*, 43:
 prefabricated buildings
 evaluating facilities of NAVCERELAB (Dykens).
 military (Bartelmes).
 rigidity and strength
 stressed-cover panels, plywood (Luxford and Erickson).
 simulated wind and snow loads (Dorey and Schriever).
 see also Loading Test
- G**
- Gaseous Fuels**
 Report of Comm. D-3, 287.
- Gasoline**
 Report of Comm. D-2, 245.
 vapor phase oxidation. Summary of Proceedings of Pacific Area Meeting, *STP 202*, 46:
 induction system
 gum—engine *versus* bench test (Keller and Liggett).
 reactions—liquid or vapor? (Nixon, Minor and Rudy).
 intake system deposit
 fuel effect (Scheule).
 valve deposit forming characteristics (Cabal and Capowski).
- Glass**
 containers
 Report of Comm. C-14, 222.
 Report of Comm. E-2, 378.
- Glass Textiles**
 Report of Comm. D-13, 332.
- Gloss**
 definitions
 Report of Comm. E-12 (appendix), 468.
- Grain Size Methods**
 (Wyman). Published in *ASTM BULLETIN*, No. 215, July, 59.
- Grease**
 Report of Comm. D-2, 245.
- Guided Missiles**
 testing (Sparling). Published in *ASTM BULLETIN*, No. 218, Dec., 52 (TP232). See also Summary of Proceedings of Pacific Area Meeting, 35.
- Gypsum**
 Report of Comm. C-11, 215.
- H**
- Hardness Testing**
 Report of Comm. E-1, 372.
- Heating Alloys**
 Report of Comm. B-4, 155.
- Honorary Membership Awards**
 Summary of Proceedings of Fifty-ninth Annual Meeting, 6.
- Hydrocarbons**
 aromatic
 Report of Comm. D-16, 342.
- I**
- Impact**
 alloys steel (Sheehan and Schwartzbart), 483. Disc., 518.
 stainless steel
 effect of composition
 heat treatment (Whittenberger, Rosenow, and Carney), 568. Disc., 586.
- V-notch Charpy**
 crack initiation and propagation (Hartbower), 521.

Insulating Materials

- dielectric measurements
 - ultra high frequency (Meahl), 312.
- electrical
 - Report of Comm. D-9, 305.
 - Report of Comm. D-20, 357.
- thermal conductivity test (Lang). Published in ASTM BULLETIN, No. 216, Sept., 58 (TP170).

Insulating Sleeve

- thermal stability (Snyder and Fantini). Published in ASTM BULLETIN, No. 218, Dec., 59 (TP239).

International Relations

- Report of Comm. on Standards, 92.

Ion Exchange

- Symposium on Ion-Exchange and Chromatography in Analytical Chemistry. Summary of Proceedings of STP 195, 1454:
 - anion-exchange in metal separations (Kraus).
 - in analysis of metals (Hague).
 - use of resins in analytical chemistry (Kunin).
 - use of techniques in analytical chemistry and radiochemistry (Hudgens).

Irradiation Effect

- zirconium mechanical properties (Kemper and Kelly), 823.

L

Lacquer

- Report of Comm. D-1, 236.

Lead

- Report of Comm. B-2, 152₇

Lectures

- Gillett
 - chemistry and metallurgy of copper (Crampton). Summary of Proceedings, 12.

Marberg

- chemistry, properties, and applications of silicones (Reed). Summary of Proceedings, 19.

Lime

- Report of Comm. C-7, 201.

Loading Test

- philosophy (Dorey and Schriever). Published in ASTM BULLETIN, No. 214, May, 57 (TP95) (R).
- see also Full-Scale Tests.

Lubricants

- Report of Comm. D-2, 245.
- see also, Oils

M

Magnesium

- bearing strength test
 - elevated temperature (Moore and Gusack), 834.
- Report of Comm. B-7, 168.

Magnesium Alloy

- painting
 - proposed method
- Report of Comm. D-1 (appendix), 249.

Magnetic Particle Testing

- Report of Comm. E-7, 461.

Malleable Iron

- Report of Comm. A-7, 138.

Masonry

- mortar
 - Report of Comm. C-12, 219.
- Summary of Proceedings of Pacific Area Meeting, 45:
 - apparent compressive strength of brick capping compounds
 - effects of type, thickness and age (Kelch and Emme).
 - brick, mortar and grout testing (Harrington).
- ceramic industry
 - testing tile (Fitzgerald and Kastenbein).
- sampling techniques (James).
- clay masonry walls
 - producing blast loading—a test method (Johnson).
- clay pipe industry
 - importance of testing (Bennett).
- grouted brick masonry—plain and reinforced
 - test methods (English and Schneider).
- reinforced concrete beams (Mackintosh).
- weathering
 - brick-mortars exposed with and without caps and flashings (McBurney), 1273.
 - Disc., 1283.

Mass Spectrometry

- Report of Comm. E-14, 475.

Max Hecht Award

- Summary of Proceedings of Fifty-ninth Annual Meeting, 25.

Membership

- Report of Board of Directors, 60.

Metal Cleaning

- Report of Comm. D-12, 328.

Metal Powders

- Report of Comm. B-9, 188.

Metals, Ferrous

- Summary of Proceedings of Pacific Area Meeting, STP 196, 37:
 - arc welds in mild steel
 - isothermal evolution of hydrogen (Flanagan and Lee).
 - shotpeening
 - effects and specifications (Fuchs).
 - stainless steel columns under compression loads (Dubuc and Welter).
 - steel stressed in torsion
 - techniques for increasing strength and fatigue life (Hendrickson).

Metals, Light

- Report of Comm. B-7, 168.

Metals, Non-Ferrous

- Summary of Proceedings of Pacific Area Meeting, STP 196, 48:
 - aluminum
 - corrosion resistance in sea water
 - evaluating by pit depth measurements (Summerson, Pryor, Keir, and Horgan).
 - beryllium copper strip
 - effect of cold rolling and heat treating on properties (Richards and Smith).

- copper
 - structural chemistry and metallurgy
 - condensed version of 1956 Gillett lecture (Crampton).
- Young's modulus
 - determination under conditions of relaxation (Fenn).
- Metals and Alloys
 - non-ferrous, corrosion of
 - Report of Comm. B-3, 154.
- Metallography
 - alloy steel
 - comparison of surface and volume transformations (Birks and Seal), 436.
 - bainite formation
 - observations with thermionic emission microscope (Bessen), 415. Disc., 425.
 - electron metallography
 - electropolishing of ferrous metals (Boswell), 426.
 - electron microstructure
 - quenched low-alloy, medium-carbon steel (Sernka and Ross), 398 (R).
 - nickel-base alloys
 - electron microscopic identification of γ' phase (Bigelow, Amy, and Brockway), 945.
 - preparation of steel specimen
 - method for making positive replicas (Le Poole and van Wijk), 409.
 - Report of Comm. E-4, 396.
 - steel
 - chemical polishing for electron metallography (Scott), 444 (R).
 - preparation of specimens for electron microscopy (Le Poole and van Wijk), 409.
- Methods of Testing
 - materials tests
 - source and use (Mathes). Published in ASTM BULLETIN, No. 217, Oct., 41.
 - Report of Comm. E-1, 372.
- Mica
 - Report of Comm. D-9, 305.
- Microchemical Apparatus
 - Report of Comm. E-1, 372.
- Microscopy
 - Report of Comm. E-1, 372.
- Moisture
 - movement through solids (Babbitt). Published in ASTM BULLETIN, No. 212, Feb., 58 (TP46).
- Mortars
 - chemical-resistant
 - Report of Comm. C-3, 199
 - masonry
 - Report of Comm. C-12, 219.

N

- Naval Stores
 - Report of Comm. D-17, 344.
- Nickel and Nickel Alloys
 - Report of Comm. B-2, 152.
- Nondestructive Testing
 - bonded metal sandwich
 - nondestructive testing (Anderson). Summary of Proceedings of Pacific Area Meeting, 34.

- radioactive tracers
 - internal components inspection (Berk, Ebert, and Keaser). Published in ASTM BULLETIN, No. 217, Oct., 65 (TP199).
 - Report of Comm. E-7, 461.
 - Symposium. Summary of Proceedings of Pacific Area Meeting, STP 213, 38, 40, 43: Committee E-7 operation (Bly).
 - detection of cracks in small cylindrical specimens
 - Eddy current and reluctance methods (Roffman).
 - electronic X-ray image systems (Holste, Jacobs, and Pace).
 - magnetic particle, penetrant testing (Migel). of heavy metals (Tenney).
 - on Southern Pacific Railroad (Pedrick).
 - properties of materials
 - ultrasonic attenuation and velocity measurements (Truell).
 - radiographic inspection
 - recommended practices (Burrill).
 - reference radiographs (Kahn).
 - radiographic procedures (Hastings).
 - ultrasonic
 - evaluation of metal-to-metal adhesive bonds (Arnold).
 - in Europe and America (Erdman).
 - inspections of aircraft forgings (Barath).
 - reflectoscope calibration techniques (Van Valkenburg).
 - Subcommittee VI of Committee E-7 activities and future projects (Smack).
 - ultrasonic scanning and recording system (McGonnagle and Beck), 1415. Disc., 1423.
- Notch Tensile Behavior
 - face centered cubic metals (Ripling), 662.
- Nylon
 - inelastic deformation under compression (Hsiao), 1425 (R).

O

- Oils
 - lubricating. Summary of Proceedings of Pacific Area Meeting, STP 214, 39, 42 and 45:
 - Diesel oils
 - analysis-unsolved problems (Lasky).
 - chromatography (Thomas).
 - filtering (Earle).
 - introduction to Symposium—Part II (James).
 - spectrographic analysis
 - determination of metals in used oils (Perkins, Miller, and Moser).
 - direct reading
 - additive manufacture (Ramsay and Rappold).
 - evaluation of used railroad oils (Barth).
 - introduction to Symposium—Part I (Gambrill).
 - sampling from Diesel locomotives (Simpson).
 - section J Committee report (Bryan).
 - X-ray
 - refinery control of additive metals (Davis).

Oils (*continued*)

steam turbine.

Symposium, *STP 211*. Summary of Proceedings of Pacific Area Meeting, 34 and 36:

additives

waterleaching (Brennan and Moyer).

anti-rust additives (Ries, Cook, and Loane).

antiwear requirements for Navy (King and Belt).

evaluation and performance (von Fuchs).

fire resistant fluids (Manley, Snyder, and Messina).

rusting in systems (Furby, Hanly, and Vincent).

Technical Committee C—section I—organization and functional aspects (Kottcamp).
determination of expected life (Mastin).

Oxidation Test

turbine oils

Report of Comm. D-2, Techn. Comm. C, Sect III, 281.

P

Packaging

Report of Comm. D-10, 315.

Paint

aluminum and aluminum-alloy surfaces
proposed method

Report of Comm. D-1 (appendix), 245.

magnesium alloy surfaces

proposed method

Report of Comm. D-1 (appendix), 249.

Report on Activities of Comm. D-1. Summary of Proceedings of Pacific Area Meeting, 50:

carbon arc light and water exposure apparatus

a study of the quality of water (Singleton).

drying oils

the D-1 program (Gallagher).

gloss measurement—past, present and future (Hammond).

latex and emulsion paints

activities of Subcommittee XII (Westgate).

measuring color differences (Ingle).

preparation of surfaces

light metal alloys (Wray and Whitby).

metals (Tuckerman).

progress review of Subcommittee IX (Weaver).

Report of Comm. D-1, 236.

Symposium. Summary of Proceedings of Pacific Area Meeting, 51, 52, 53:

glare-reducing window coatings

a new optical parameter (Hitchcock and Starr).

phosphatizing systems (Spring).

protective coatings

metal surfaces in marine environments (Whiteneck).

municipal use (Rigdon).

railroad industry (Grieve).

silicones in the protective coatings industry (Cahn).

solvents and thinners (Chittick).

vinyl metal finishes—testing (Spessard).

why specifications?

tests and controls (Pickett).

tag flash tester

proposed method

Report of Comm. D-1 (appendix), 262.

traffic

accelerated settling test (Vannoy). Published in *ASTM BULLETIN*, No. 216, Sept., 56 (TP168).

Paper

Report of Comm. D-6, 297.

Report of Comm. D-9, 305.

Papers and Publications

Report of Comm. on Papers and Publications, 100.

Paperboard

Report of Comm. D-6, 297.

Particle Size

Report of Comm. E-1, 372.

Paving Materials

Report of Comm. D-4, 289.

Petroleum

activities of Committee D-2. Published in *ASTM BULLETIN*, No. 213, April, 48.

cutting fluids

"active" sulfur content (Brandes). Published in *ASTM BULLETIN*, No. 214, May, 28.

lubricants

extreme pressure properties (Asseff, Levin, Sprague, and Cooperators). Published in *ASTM BULLETIN*, No. 216, Sept., 25.

Report of Comm. D-2, 245.

Petroleum Products

oxidation of turbine oils

Report of Comm. D-2, Techn. Comm. C, Sect. III, 281.

see also Oils

pH Measurement

Report of Comm. E-1, 372.

Symposium. Summary of Proceedings of STP 190, 1455:

foreword (Ashcraft).

indicator acidity functions for nonaqueous and mixed solvents (Paul and Long).

meaning and standardization (Bates).

measurement

in analytical chemistry (Sendroy).

of acidity in nonaqueous media (Kilpatrick).

modern development in instrumentation (Clark and Perley).

quantitative applications in analytical chemistry (Freiser).

reference electrodes at high temperatures and pressures (Leonard).

Pigments

Report of Comm. D-1, 236.

Pipe

clay

Report of Comm. C-4, 200.

concrete

Report of Comm. C-13, 220.

- Pitch
Report of Comm. D-8, 303.
- Plastics
aging test
fluorescent sunlamps (Reinhart and Mutchler). Published in ASTM BULLETIN, No. 212, Feb., 45 (TP33).
high speed tension
testing machine (Dorsey, McGarry, and Dietz). Published in ASTM BULLETIN, No. 211, Jan., 34 (TP6).
oscillating strain
apparatus for measuring (Maxwell). Published in ASTM BULLETIN, No. 215, July, 76 (TP132) (R).
Papers on Plastics. Summary of Proceedings of Pacific Area Meeting, 34:
bonded metal sandwich
nondestructive testing (Anderson).
epoxy materials
electrical and mechanical measurements (Delmonte).
standards—their impact on industry (Stock and Reinhart).
Report of Comm. D-9, 305.
Report of Comm. D-20, 357 (appendix), 362.
vibrating reed test (Strella). Published in ASTM BULLETIN, No. 214, May, 47 (TP105).
- Polishes
wax
Report of Comm. D-21, 366.
- Polyethylene Resins
modulus-density relationship
measuring tensile modulus (Adams and Supnik). Published in ASTM BULLETIN, No. 217, Oct., 70 (TP204).
- Polyvinyl Butyral
proposed method
Report of Comm. D-1 (appendix), 445.
- Porcelain Enamels
Report of Comm. C-22, 234.
- Preservatives
wood
Report of Comm. D-7, 300.
- President's Address
annual address (Fellows), 55.
- President's Talks
research in electric power field (Fellows). Published in ASTM BULLETIN, No. 216, Sept., 39 (TP151); No. 215, July, 69 (TP125); annual address, No. 217, Oct., 21.
- Prestrain
torsional and tensile
fracture effects (Rozalsky), 621 (R).
- Printing Ink
Report of Comm. D-1, 236.
- Proposed Methods
aluminum
Report of Comm. D-1 (appendix), 245.
anodic coatings
Report of Comm. D-1 (appendix), 245, 249.
building materials
water vapor transmission. Published in ASTM BULLETIN, No. 215, July, 63.
calcium and magnesium oxides in lime. Published in ASTM BULLETIN, No. 218, Dec., 27.
carbon black. Published in ASTM BULLETIN, No. 215, July, 51.
carnauba wax benzene solubility test
accuracy and usefulness. Published in ASTM BULLETIN, No. 214, May, 27.
ethylene plastics
environmental stress cracking. Published in ASTM BULLETIN, No. 218, Dec., 25.
flash point
Report of Comm. D-1 (appendix), 262.
magnesium
Report of Comm. D-1 (appendix), 249.
paint
Report of Comm. D-1 (appendix), 245, 249, 442, 445.
polyvinyl butyral
Report of Comm. D-1 (appendix), 445.
projection welding electrical contacts, suggested dimensional standard. Published in ASTM BULLETIN, No. 217, Oct., 35.
sandblasting
Report of Comm. D-1 (appendix), 245.
solvents
Report of Comm. D-1 (appendix), 262, 442.
tag flash tester
Report of Comm. D-1 (appendix), 262.
volatility test
Report of Comm. D-1 (appendix), 442.
wire-brushing
Report of Comm. D-1 (appendix), 245.
- Q
- Quality Control
Report of Comm. E-11, 466.
- Quicklime
Report of Comm. C-7, 201.
- R
- Radiation Effect
Report of Comm. E-10, 465.
Symposium, STP 208. Summary of Proceedings of Pacific Area Meeting, STP 208, 48 and 50:
displaced atoms in solids
comparison between theory and experiment (Dienes).
experimental
on graphite (Carter).
survey on fuel materials (Bowen).
uranium-zirconium alloys
effect of heat on irradiation-induced dimensional changes (Kittel, Paine, and Chiswick).
facilities and mechanics of testing
a program (Whitney, Chandler, Gates, and Calkins).
irradiated materials (Berggren, Dismuke, Feldman, and Wilson).
Westinghouse testing reactor (De Agazio).
neutron bombardment
effects on structural materials (Castleman).

- Radiation Effect (*continued*)
 plain-carbon steels
 effect on notched-bar impact properties (Leeser and Deily).
 plain-carbon steels, stainless steels, and non-ferrous alloys
 effects on welds and notches (Leeser).
 plastics and elastomers (Sisman and Bopp).
 precipitation hardening alloys—copper-iron (Boltax).
 type 347 stainless steel
 tensile and hardness properties
 effects of fast neutrons (Murphy and Paine).
- Radioactive Isotopes
 Report of Comm. E-10, 465.
 Symposium, *STP 215*. Summary of Proceedings of Pacific Area Meeting, 51, 52:
 activation analysis for industry (DeHaan).
 autoradiography
 potential as a testing technique (Gomberg).
 beta ray backscatter thickness gage applied to traffic paint wear studies (Pocock).
 dilution analysis for determining naphthalene in coal tar (Neville).
 electroplating and metal preservation (Eisler).
 evaluation of rubber deterioration (Young and Richards).
 irradiated organic materials
 problem of establishing specifications (Sisman).
 radiation effects in metals
 influence on ASTM standards? (Wilson and Berggren).
 radiation dosimetry problems (Calkins).
 thickness and concentration gaging (Newcheck, Kohl, and Forrest).
 tracers
 in soil removal and detergency (Ashcraft).
 refinery scale applications (Guinn, Lukens, and Wagner).
- Radioactive Tracers
 inspection of internal components (Berk, Ebert, and Kesser). Published in *ASTM BULLETIN*, No. 217, Oct., 65 (TP199).
- Radiography
 quality of inspection (O'Connor and Criscuolo). Published in *ASTM BULLETIN*, No. 213, Apr., 53 (TP63) (R).
 Report of Comm. E-7, 461.
- Railroad Materials
 Diesel fuels and lubricants.
 Symposium, *STP 214*. Summary of Proceedings of Pacific Area Meeting, 40, 45:
 cleaning materials
 additives for economy type fuels (Reinhard).
 cleaners and procedures (Ramsey).
 research (Seniff).
 standardization of materials and methods (Jursch).
 lubricating requirements as related to fuels (Broughten and Moore).
 No. 6 residual fuel in $8\frac{1}{8}$ x 10 opposed piston engine (Beadle).
 operation with dual fuel systems (Garin).
 residual fuels in high speed engines (Jones, Kipp and Goodrich).
- Rayon
 Report of Comm. D-13, 332.
- Refractories
 Report of Comm. C-8, 202, 207.
- Relaxation
 high-tensile strength steel wire
 for prestressed concrete (McLean and Siess).
 Published in *ASTM BULLETIN*, No. 211, Jan., 46 (TP18); Disc., No. 214, May, 65 (TP123) (R).
- Research
 electric power field (Fellows). Published in *ASTM BULLETIN*, No. 216, Sept., 39 (TP151).
 report of Administrative Comm. on Research, 98.
- Rheological Testing
 elastomers
 low temperature (Chatten, Scoville, and Conant). Published in *ASTM BULLETIN*, No. 217, Oct., 47 (TP181).
- Road Materials
 Report of Comm. D-4, 289.
 Report of Comm. D-18, 346.
- Road and Paving Materials
 Summary of Proceedings of Pacific Area Meeting, *STP 212*, 37:
 asphalt
 ASTM tests
 correlation on results between laboratories (Zube and Skog).
 oven heat tests-reproducibility (Winniford).
 viscosity in absolute units
 measurement by sliding-plate microviscometer (Griffin, Miles, Penther, and Simpson).
 strength of granular materials
 effect of aggregate particles (Vallerga, Seed, Monismith, and Cooper).
 weathering
 infrared machine-California design (Skog).
- Roofing Materials
 Report of Comm. D-8, 303.
- Rosin
 Report of Comm. D-17, 344.
- Rubber
 Report of Comm. D-11, 319.
 removal from cushioning materials (Rosenthal and Papa). Published in *ASTM BULLETIN*, No. 216, Sept., 66 (TP178).
 vulcanized
 stress relaxation. Published in *ASTM BULLETIN*, No. 211, Jan. 32, (TP4).
- Rubber Parts
 specifications in buying (Stringfield). Summary of Proceedings of Pacific Area Meeting, 35.

S

Sand
 in-place density

- water content relationship (Griffin). Published in ASTM BULLETIN, No. 212, Feb., 51 (TP39).
- Sandblasting
proposed method
Report of Comm. D-1 (appendix), 245.
- Sandwich Construction
Symposium, *STP 201*. Summary of Proceedings of Pacific Area Meeting, 47 and 51:
adhesives for aircraft structures
testing at high temperature (Battalora and Pulsifer).
aluminum honeycomb
shear strength
effect of dimensional factors and temperature (Cheorvas and Plumtree).
architectural panels
selection of materials (Parkinson).
bonded details
empirical studies—conclusions (Sheridan and Merriman).
for helicopters (Stevens).
heat resistant materials (Steele).
metal-to-metal adhesive bonds
non-destructive evaluation by ultrasonic technique (Arnold).
metal-to-resin adhesion
determination by stripping test (Snodden).
testing at elevated temperatures (Kuenzi).
- Shear
creep rupture
antimony—lead alloy (Greenwood), 859.
evaluation of
test variables (Fenn and Clapper), 842. Disc., 858.
- Shellac
Report of Comm. D-1, 236.
- Shipping Containers
Report of Comm. D-10, 315.
- Siding Materials
Report of Comm. D-8, 303.
- Silicones
chemistry, properties, and applications
Marburg Lecture (Reed)—Summary of Proceedings, 19.
- Simulated Service Testing
Report of Administrative Comm. on Simulated Service Testing, 107.
- Soaps
Report of Comm. D-12, 328.
- Soils
applications of environmental testing (Burmister), 1351.
deep foundations
bearing capacity of hardpan (Housel), 1320 (R). Disc., 1347.
density, sand cone test
accuracy control (Coffman). Published in ASTM BULLETIN, No. 218, Dec., 57 (TP237).
gamma ray transmission (Bernhard, Chasek, and Griggs), 1288. Disc., 1300.
judgment and environment (Burmister). Published in ASTM BULLETIN, No. 217, Oct., 55 (TP189) (R).
lime for stabilization of loess (Laguros, Davidson, Handy, and Chu), 1301 (R). Disc., 1316.
moisture content, density, void properties (McLeod), 1372. Disc., 1396.
Report of Comm. D-18, 346.
Papers on Soils. Summary of Proceedings of Pacific Area Meeting, *STP 206*, 39, 41, 44:
consolidation by vibration
of pipe bedding—San Diego aqueduct (Holtz).
with compactors
for cohesive soil (Converse).
on granular base courses (White).
deadman anchorages in sand (Smith).
determining density and moisture
radiation methods (Bernhard).
evaluating friction and cohesion
a consolidated direct shear test (Palmer, Brown, and Yeomans).
foundations and subsurface investigations
with electrical resistivity surveys in Southern California (Maurseth and Mitchell).
loading, field tests
“fixed head” in sand—“free head” in clay—lateral on instrumented piles (Mason).
microseismics (Bernhard).
resistance
a generalized theory (Housel).
soil-cement mixtures
strength and elastic properties (Felt and Abrams).
universal testing machine (Maloney).
- shear testing
Symposium on In-Place Testing by the Vane Method. Summary of Proceedings of *STP 193*, 1397:
an apparatus and method (Gibbs).
field vane tests in Sweden-5 yr experience (Cadling and Lindskog).
measuring device (Hill).
present status of vane testing (Osterberg).
Swedish vane borer design (Kallstenius).
tests in Gulf of Mexico (Fenske).
vane testing in Norway (Anderson and Bjerrum).
- Solder
Report of Comm. B-2, 152.
Symposium. Summary of Proceedings of *STP 189*, 1138:
dip soldered printed circuits (Miller and Johns).
fluxes
and techniques for aluminum (Dowd).
and flux principles (Mample).
corrosive (MacIntosh).
non-corrosive—spread and corrosion properties (Sohl).
use of rosin (Disque).
in semiconductor devices (Lootens).
joint strength characteristics
copper liner in aluminum casting (Davis).
dip solder printed circuit joint characteristics (Johns and Miller).
electrical connections (Rombach).

Solder (*continued*)

- Symposium (*continued*)
 - gray tin formation in joints stored at low temperature (Williams).
 - numerical evaluation system (Pessel).
 - soft solders at elevated temperatures (Pattee and Evans).
 - symposium summation (Harnden).
 - tin disease in alloys (Bornemann).
 - paste solder alloys-industrial survey (Williams).
 - ultrasonic soldering of aluminum (Jones and Thomas).

Solvents

- degreasing (Kircher). Summary of Proceedings of Pacific Area Meeting, 35.
- proposed method,
 - Report of Comm. D-1 (appendix), 442.
- proposed revised method
 - Report of Comm. D-1 (appendix), 262.

Spectrochemical Analysis

- universal method. Published in ASTM BULLETIN, No. 216, Sept., 29.

Speed of Testing

- Report of Comm. E-1, 372.

Springs

- helical compression
 - material for use from 600 to 1400 F (Matters and Lochen), 672. Disc., 683.

Standardization

- actions on standards. Published in ASTM BULLETIN, No. 212, Feb., 7; No. 213, Apr., 33; No. 215, July, 42; No. 216, Sept., 13; No. 217, Oct., 29.
- Industry and Government trade technical groups and government. Published in ASTM BULLETIN, No. 211, Jan., 26 (Mochel); No. 214, May, 31.
- legal implications (Irvine). Published in ASTM BULLETIN, No. 212, Feb., 28.
- Report of Administrative Comm. on Standards, 92.

Statistical Analysis

- Report of Comm. E-11, 466.

Steam Quality

- Symposium. Summary of Proceedings of STP 192, 1457:
 - construction and operation of Larson-Lane analyzers (Sisson, Straub, and Lane).
 - corrections to conductivity measurements (Parker and Ziobro).
 - determination by tracer techniques (Coulter and Campbell).
 - introduction (Baker).
 - measurement and purification to 0.01 ppm total dissolved solids (Gurney).

Steel

- alloy
 - impact properties (Sheehan and Schwartzbart), 483. Disc., 518.
- bainite formation
 - observations with thermionic emission microscope (Bessen), 415. Disc., 425.
- chemical polishing for electron metallography (Scott), 444 (R).
- comparison of surface and volume transformations (Birks and Seal), 436.

corrosion

- Report of Comm. A-5, 130.
- corrosion-resisting
 - Report of Comm. A-10, 140.
- electron metallography
 - electropolishing (Boswell), 426.
- electron microstructure
 - quenched low-alloy, medium-carbon (Sernka and Ross), 398 (R).
- notch strength
 - heat treating effects (Sachs, Weiss, and Klier), 555. Disc., 565.
- precipitation hardening corrosion resistant
 - uni-directional axial tension fatigue tests (Weisman, Mellil, and Matsuda). Summary of Proceedings of Pacific Area Meeting, 53.
- preparation of specimen for electron microscopy
 - method for making positive replicas (Le Poole and van Wijk), 409.
- Report of Comm. A-1, 108.
- rimmed structural
 - brittle behavior (Wessel), 540. Disc., 553.
- stainless
 - corrosion
 - all-glass multiple-test apparatus (Alger, Roberts, Lent, and Anderton). Published in ASTM BULLETIN, No. 214, May, 57 (TP115).
 - effect of composition
 - and heat treatment on impact (Whittenberger, Rosenow, and Carey), 568. Disc., 586.
 - stainless and carbon
 - at low temperature (Collins, Ezekiel, Sepp, and Rizika), 687. Disc., 699.
 - stress-strain relations
 - strain rate and temperature effect (MacDonald, Carlson, and Lankford) (R) 704. Disc., 721.

Stone

- natural building
 - Report of Comm. C-18, 229.

Strain Gage

- adhesive bond strain (Norris). Published in ASTM BULLETIN, No. 218, Dec., 40 (TP218).

Stress-Hardness Relation

- (Dervishyan). Published in ASTM BULLETIN, No. 215, July, 71 (TP127).

Stress Relaxation

- vulcanized rubber. Published in ASTM BULLETIN, No. 211, Jan., 32 (TP4).

Stress-Rupture

- heat resistant between 600 and 1000 F (Sessler and Brown), 738. Disc., 753.

Surface Flammability

- measurement
 - using radiant energy source (Robertson, Gross, and Loftus), 1437.

Sustained loading test

- small, inexpensive device (Raring and Rinebolt). Published in ASTM BULLETIN, No. 213, Apr., 74 (TP84).

T

- Tag Flash Tester
proposed method
Report of Comm. D-1 (appendix), 262.
- Tar
Report of Comm. D-4, 289.
Report of Comm. D-8, 303.
- Technical Committee Notes,
Published in ASTM BULLETIN, No. 215, July 49; No. 214, May, 22; No. 216, Sept., 22; No. 218, Dec., 20.
- Temperature Effect
creep of aluminum
effect of creep stress
history (Sherby, Trozera, and Dorn), 789 (*R*). Disc., 805.
- direct tensile fatigue
AMS 5765 (S-816) alloy (Hoffman), 1063.
- ductility of metals
brittle skins effect (Form and Baldwin) (*R*), 645. Disc., 659.
- heat-resistant alloys
influence of hot working conditions (Ewing and Freeman), 756.
- helical compression springs
materials for use from 600 to 1400 F (Matters and Lochen), 672. Disc., 683.
- magnesium
bearing strength test (Moore and Gusack), 834.
- notch tensile behavior
face centered cubic metals (Ripling), 662.
Report of Comm. B-4, 155.
- stainless steel
effect of composition
and heat treatment on impact (Whittenberger, Rosenow, and Carney), 568. Disc., 586.
- stainless and carbon steels (Collins, Ezekiel, Sepp, and Rizika), 687. Disc., 699.
- stress-rupture
heat resistant between 600 and 1000 F (Sessler and Brown) (*R*), 738. Disc., 753.
- titanium alloys
uniform elongation (Holden, Ogden, and Jaffee). Summary of Proceedings of Pacific Area Meeting, 35.
- torsional and tensile prestrain
fracture effect (Rozalsky), 621 (*R*).
work of joint committee (Smith). Published in ASTM BULLETIN, No. 212, Feb., 23.
- Tensile Modulus Measurement
polyethylene resins
modulus-density relationship (Adams and Supnik). Published in ASTM BULLETIN, No. 217, Oct., 70 (TP204).
- Tension
apparatus
at -320 F to -452 F (Wessel). Published in ASTM BULLETIN No., 211, Jan., 40 (TP12) (*R*).
brittle behavior
rimmed structural steel (Wessel), 540. Disc., 553.
- chromium-nickel-manganese
stainless sheet steel (Walsh, Cook and Lula), 923. Disc., 944.
- high-speed machine
plastics (Dorsey, McGarry and Dietz). Published in ASTM BULLETIN, No. 211, Jan., 34 (TP6).
- Symposium on Tension Testing of Non Metallic Materials. Summary of Proceedings of STP 194, 1456:
adhesives (Dietz).
introduction (Webber).
methods for wood, wood-base materials and sandwich constructions (Markwardt and Youngquist).
plastics (Reinhart).
rubber (Tangenberg).
summary (Webber).
tensile load-deformation of textile structures (Backer).
tensile strength of paper in industry—present practices (Fachet and Plimpton).
- Test Sites
atmospheric
Report of Advisory Comm. on Corrosion, 191.
- Testing Machines
Report of Comm. E-1, 372.
- Testing Methods
Report of Comm. E-1, 372.
- Textile Materials
Report of Comm. D-13, 332 (appendix), 334.
- Thermal Conductivity
insulating materials (Lang). Published in ASTM BULLETIN, No. 216, Sept., 58 (TP170).
- Thermal Insulating Materials
Report of Comm. C-16, 226.
- Thermocouples
service in reducing atmospheres (Guettel). Published in ASTM BULLETIN, No. 216, Sept., 64 (TP176).
- Thermometers
Report of Comm. E-1, 372.
- Tile
clay
Report of Comm. C-15, 224.
- drain
Report of Comm. C-15, 224.
- Timber
Report of Comm. D-7, 300.
- Titanium
Report of Comm. B-2, 152.
Symposium, STP 204. Summary of Proceedings of Pacific Area Meeting, 35, 38, and 41:
binary, ternary, quaternary
elevated temperature application (Crossley, Carew, and Kessler).
Brinell hardness testing (Baker).
elastic modulus measurement (Graft and Rostoker).
elevated temperature properties (Sherman, Parris, and Kessler).

Titanium (*continued*)Symposium (*continued*)

- fuming nitric acid
 - ignition and stress corrosion cracking (Rittenhouse).
 - micro notched-bar impact test (Holden, Ogden, and Jaffee).
- oxygen analysis (Fowler).
- quality evaluation (Blake and Eck).
- thermal stability (Schwartzberg, Williams, and Jaffee).
- effect of annealing treatment and composition (Ogden, Holden, and Jaffee).
- unalloyed
 - better uniformity through statistical techniques (Smith).
- unalloyed sheet (Schapiro and Barry).
- standardized sample
 - preparation and testing techniques (Folkman and Schussler).
- uniform elongation
 - effect of temperature (Holden, Ogden, and Jaffee).
- wrought products
 - properties and characteristics (Stark).

Transformer Oil

Report of Comm. D-9, 305.

Turbine Oils

see also, Oils.

oxidation

Report of Comm. D-2, Sect. III, 281.

U

Ultrasonic Testing

Report of Comm. E-7, 461.

Unsolved Problems

Published in ASTM BULLETIN, No. 217, Oct., 36.

V

Vapor Barriers

Report of Comm. C-16, 226.

Report of Comm. D-1, 236.

Vapor Phase

Symposium, *STP 202*. Summary of Proceedings of Pacific Area Meeting, 46.

induction system

gum—engine *versus* bench test (Keller and Liggett).

reactions—liquid or vapor? (Nixon, Minor and Rudy).

intake deposit

effect of fuel (Cabal and Capowski).

(Scheule).

see also Gasoline.

Viscosity Index

Symposium on Viscosity-Index Systems. Published in ASTM BULLETIN, No. 215, July: comparison of proposals (Geniesse), 81 (TP137).

viscosity-temperature function (Wright), 84 (TP140).

use of ASTM slope for predicting viscosities (Klaus and Fenske), 87 (TP143) (R).

Volatility Test

proposed method,

Report of Comm. D-1 (appendix), 442.

Vulcanized Rubber

stress relaxation. Discussion. Published in ASTM BULLETIN, No. 211, Jan., 32 (TP4).

W

Water

appearance

Report of Comm. D-19, 349.

boiler feedwater

Report of Comm. D-19, 349.

evaporative industry

Report of Comm. D-19, 349.

industrial

Report of Comm. D-19, 349.

industrial wastes

Report of Comm. D-19, 349.

Symposium on Industrial Water and Industrial Waste Water, *STP 207*. Summary of Proceedings of Pacific Area Meeting, 49:

Committee D-19: the first quarter century (Adams).

industrial and industrial waste

treatment by organic flocculants and flocculating aids (Rice).

industrial waste

problems in Southern California (Wilson).
pollution control in Los Angeles area (Johnston).

sea water purification (Elliott).

testing methods

Report of Comm. D-12, 349.

Report of Comm. D-19 (appendix), 355.

Water Vapor Transmission

building materials

proposed methods. Published in ASTM BULLETIN, No. 215, July, 63.

Waterproofing

Report of Comm. D-8, 303.

Wax

floor

Report of Comm. D-21, 366.

natural

Report of Comm. D-21, 366.

Wear

nitrided chromium applications (McGee and Sump). Published in ASTM BULLETIN, No. 217, Oct., 58 (TP192).

Weathering

brick masonry

mortars exposed with and without caps and flashings (McBurney), 1273, Disc., 1283.

Whiteware

ceramic

Report of Comm. C-21, 232.

Wire-Brushing

proposed method,

Report of Comm. D-1 (appendix), 245.

Wire Testing

atmospheric exposure

Report of Subcommittee XV of Comm. A-5, 133.

Wood

for marine use.

- Symposium on Wood for Marine Use and its Protection from Marine Organisms, *STP 200*. Summary of Proceedings of Pacific Area Meeting, 36:
 - marine organisms—borers
 - distribution in U. S. (Menzies and Turner).
 - importance of local species in specifying protecting agents (Vind, Maraoka, Casey, and Hochman).
 - migration (Edmondson).
 - performance tests of heavy metal compounds inhibitors (Roe, Hochman, and Holden).
 - treated with preservatives
 - exposure tests (Richards).
- glued-laminated constructions. Summary of Proceedings of Pacific Area Meeting, *STP 209*, 46:
 - developments (Eby).
- dimension lumber
 - range in strength qualities (Wood).
- engineered design and construction (Ketchum).
- factors affecting strength and design (Freas)
- softwood plywood design and construction (Countryman).
- Report of Comm. D-7, 300.
- Wood Poles
 - research program. Published in *ASTM BULLETIN*, No. 214, May, 25.
- Summary of Proceedings of Pacific Area Meeting, 40:
 - for communication lines (Lundsten).
 - need for research (Markwardt).
 - production in relation to forest resource (Matson).
 - specifications (Smith).
 - testing for ASTM (Wood).
- Wool
 - Report of Comm. D-13, 332.
- Wrought Iron
 - Report of Comm. A-2, 126

Z

- Zinc
 - Report of Comm. B-2, 152.
- Zirconium
 - irradiation effect on mechanical properties (Kemper and Kelly), 823.

1956 PAPERS

LIST OF SPECIAL TECHNICAL PUBLICATIONS

The publications listed below have been compiled during the year 1956 to be issued as separate publications not included in either Proceedings or ASTM BULLETIN. For a list of earlier Special Technical Publications, see the original listings in Proceedings, Volume 48, page 1352, and the supplementary listings in Volume 49, page 1240, Volume 50, page 1490, Volume 51, page 1322, Volume 52, page 1309, Volume 53, page 1197, Volume 54, page 1388, and Volume 55, page 1250. A complete list of Special Technical Publications covering all publications, up to and including 1950, is included in the 50 Year Index to ASTM Publications. Also a complete list up to and including 1955 is published in the Five-Year Index to ASTM Publications (1951-1955).

SPECIAL TECHNICAL PUBLICATION NUMBER	TITLE	SPECIAL TECHNICAL PUBLICATION NUMBER	TITLE
7-B	Significance of Tests of Petroleum Products (1956)	197	Symposium on Properties, Tests, and Performance of Electrodeposited Metallic Coatings (1956)
56-T	1955 Supplement to the Bibliography and Abstracts on Electrical Contacts (1956).	198	Symposium on Corona (1956)
58-C	Report on Standard Samples and Related Materials for Spectrochemical Analysis, Compiled by Robert E. Michaelis (1956).	199	Elevated Temperature Properties of Wrought Medium-Carbon Alloy Steels (1956)
150-A	Bibliographical Abstracts for Methods for Analysis of Synthetic Detergents (1888-1956)	200	*Symposium on Wood for Marine Use (1956)
186	Method for Reducing the Effect of Barometric Pressure in Measurement of Octane Number (1956)	201	*Symposium on Structural Sandwich Construction (1956)
187	Relaxation Properties of Steels and Super-Strength Alloys at Elevated Temperatures (1956)	202	*Symposium on Vapor Phase (1956)
188	Symposium on Minimum Property Values of Electrical Insulating Materials (1956)	203	<i>Unassigned</i>
189	Symposium on Solder (1956)	204	*Symposium on Titanium (1956)
190	Symposium on pH Measurement (1956)	205	*Papers on Cement and Concrete (1956)
191	Symposium on Specific Gravity of Bituminous Coated Aggregates (1956)	206	*Papers on Soils (1956)
192	Symposium on Steam Quality (1956)	207	*Symposium on Industrial Water and Industrial Waste Water (1956)
193	Symposium on In-Place Shear Testing of Foundation Soil by the Vane Method (1956)	208	*Symposium on Radiation Effects (1956)
194	Symposium on Tension Testing of Non-Metallic Materials (1956)	209	*Design and Tests of Building Construction—Seismic and Shock Loading and Glued Laminated Constructions (1956)
195	Symposium on Ion-Exchange and Chromatography in Analytical Chemistry (1956)	210	*Symposium on Full-Scale Tests on House Structures (1956)
196	*Papers on Metals (1956)	211	*Symposium on Steam Turbine Oils (1956)
		212	*Papers on Road and Paving Materials (1956)
		213	*Symposium on Nondestructive Testing (1956)
		214	*Symposium on Railroad Materials Including Lubricating Oils (1956)
		215	*Symposium on Radioactive Isotopes (1956)
			*West Coast Papers.

nd
ed

of
oy
se
ch
)

te

nd

ts

n-
d-
ac-

on

ils

te-

st-

als

oes